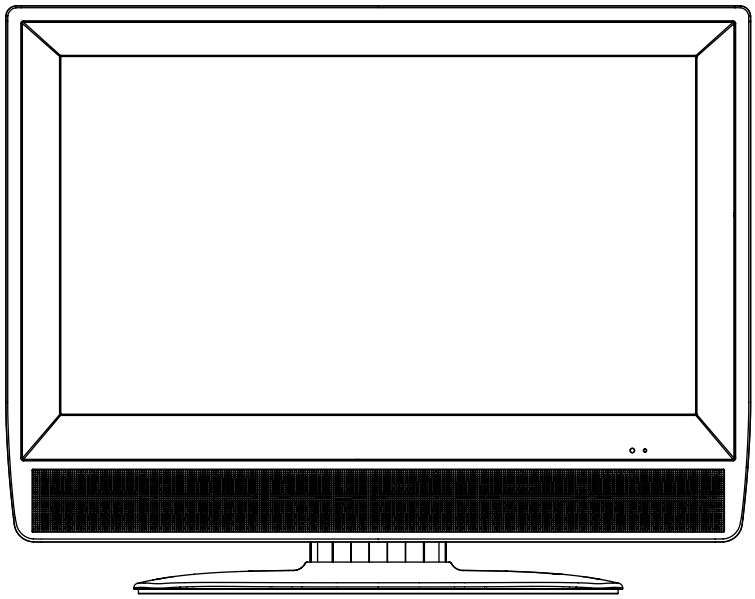
SHARP®

LC-32D40U

SERVICE MANUAL

LCD COLOR TELEVISION



ORIGINAL
MFR'S VERSION A

Design and specifications are subject to change without notice.

SERVICING NOTICES ON CHECKING

1. KEEP THE NOTICES

As for the places which need special attentions, they are indicated with the labels or seals on the cabinet, chassis and parts. Make sure to keep the indications and notices in the operation manual.

2. AVOID AN ELECTRIC SHOCK

There is a high voltage part inside. Avoid an electric shock while the electric current is flowing.

3. USE THE DESIGNATED PARTS

The parts in this equipment have the specific characters of incombustibility and withstand voltage for safety. Therefore, the part which is replaced should be used the part which has the same character.
Especially as to the important parts for safety which is indicated in the circuit diagram or the table of parts as a ⚠ mark, the designated parts must be used.

4. BE CAREFUL WITH THE LCD PANEL

Avoid a shock to the panel while servicing. Take enough care to deal with it.

5. PUT PARTS AND WIRES IN THE ORIGINAL POSITION AFTER ASSEMBLING OR WIRING

There are parts which use the insulation material such as a tube or tape for safety, or which are assembled in the condition that these do not contact with the printed board. The inside wiring is designed not to get closer to the pyrogenic parts and high voltage parts. Therefore, put these parts in the original positions.

6. PERFORM A SAFETY CHECK AFTER SERVICING

Confirm that the screws, parts and wiring which were removed in order to service are put in the original positions, or whether there are the portions which are deteriorated around the serviced places serviced or not. Check the insulation between the antenna terminal or external metal and the AC cord plug blades. And be sure the safety of that.

(INSULATION CHECK PROCEDURE)

1. Unplug the plug from the AC outlet.
2. Remove the antenna terminal on TV and turn on the TV.
3. Insulation resistance between the cord plug terminals and the eternal exposure metal **[Note 2]** should be more than 1M ohm by using the 500V insulation resistance meter **[Note 1]**.
4. If the insulation resistance is less than 1M ohm, the inspection repair should be required.

[Note 1]

If you have not the 500V insulation resistance meter, use a Tester.

[Note 2]

External exposure metal: Antenna terminal
Earphone jack

HOW TO ORDER PARTS

Please include the following informations when you order parts. (Particularly the VERSION LETTER.)

1. MODEL NUMBER and VERSION LETTER
   The MODEL NUMBER can be found on the back of each product and the VERSION LETTER can be found at the end of the SERIAL NUMBER.
2. PART NO. and DESCRIPTION
   You can find it in your SERVICE MANUAL.

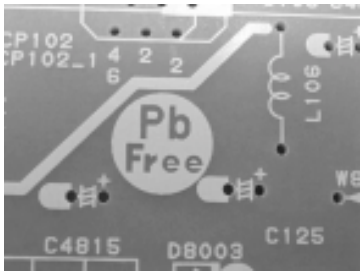
IMPORTANT

When you exchange IC and Transistor with a heat sink, apply silicon grease (YG6260M) on the contact section of the heat sink. Before applying new silicon grease, remove all the old silicon grease.
(Old grease may cause damage to the IC and Transistor).

ABOUT LEAD FREE SOLDER (PbF)

Distinction of PbF PCB:

PCBs (manufactured) using lead free solder will have a PbF printing on the PCB.
(Please refer to figures.)



Caution:

- Pb free solder has a higher melting point than standard solder;
  Typically the melting point is 86°F~104°F(30°C~40°C) higher.
  Please use a soldering iron with temperature control and adjust it to 650°F ± 20°F (350°C ± 10°C).
  In case of using high temperature soldering iron, please be careful not to heat too long.
- Pb free solder will tend to splash when heated too high (about 1100°F/ 600°C).
- All products with the printed circuit board with PbF printing must be serviced with lead free solder.
  When soldering or unsoldering, completely remove all of the solder from the pins or solder area,
  and be sure to heat the soldering points with the lead free solder until it melts sufficiently.

Recommendations

Recommended lead free solder composition is Sn-3.0Ag-0.5Cu.

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GENERAL SPECIFICATIONS

G-1	**TV System**	LCD	LCD Size / Visual Size		31.5 inch / 800.4mmV
			LCD Type		Color TFT LCD
			Number of Pixels		1366(H) x 768(V)
			View Range	Left/Right	88/88 degree
				Up/Down	88/88 degree
		Color System			NTSC
		Speaker			2 Speaker
			Position		Front
			Size		2.2 x 5.0 inch
			Impedance		4 ohm
		Sound Output	Max		10W + 10W
			10%(Typical)		---
G-2	**Tuning System**	Broadcasting System	Analog		US System M
			Digital		ATSC(8VSB)/QAM
		Tuner and Receive CH	System		1Tuner
			Destination		US (W/CABLE)
			CH Coverage		2~69, 4A, A-5~A-1, A~I, J~W, W+1~W+84
		Intermediate Frequency Digital			44.00MHz
		Intermediate Frequency Analog	Picture(FP)		45.75MHz
			Sound(FS)		41.25MHz
			FP-FS		4.50MHz
		Preset CH			No
		Stereo/Dual TV Sound			US-Stereo
		Tuner Sound Muting			Yes
G-3	**Signal**	Video Signal	Input Level		1 V p-p/75 ohm
			Output Level		--
			S/N Ratio (Weighted)		--
			Horizontal Resolution at DVD Mode		--
					--
		RGB Signal	Output Level		--
		Audio Signal	Input Level		0.85 V p-p/50k ohm
			Output Level	at DVD	--
				at TV	0.85 V p-p/1k ohm
					0-1.70 V p-p/1k ohm (Variable out mode)
			Digital Output Level		0.5 V p-p/75 ohm
			S/N Ratio at DVD (Weighted)		--
			Harmonic Distortion		--
			Frequency Response :	at DVD	--
				at Video CD	--
				at SVCD	--
				at CD	--
G-4	**Power**	Power Source	AC		120V, 60Hz
			DC		--
		Power Consumption		at AC	170W at 120V 60Hz
				at DC	--
			Stand by (at AC)		1W at 120V 60Hz
			Energy Star		Yes
			Per Year		-- kWh/Year
		Protector	Power Fuse		Yes
			Safety Circuit		Yes
			IC Protector(Micro Fuse)		Yes
G-5	**Regulation**		Safety		UL/CSA
			Radiation		FCC/IC
			Laser		--
G-6	**Temperature**		Operation		0oC ~ +40oC
			Storage		-20oC ~ +60oC
G-7	**Operating Humidity**				Less than 80% RH
G-8	**Clock and Timer**	Clock			Yes
		Sleep Timer	Max Time		120 Min
			Step		10 Min
		On Timer	Program		No
		Off Timer	Program		No
		Game Timer			No
		Wake Up Timer			No
		Timer Back-up (at Power Off Mode)	more than		-- Min Sec

GENERAL SPECIFICATIONS

G-9	**Remote Control**	Unit		RC-MP
		Glow in Dark Remocon		No
		Remocon Format		SHARP
		Format		SHARP
		Custom Code		10000 / 10001
		Power Source	Voltage(D.C)	3V
			UM size x pcs	UM-4 x 2 pcs
		Total Keys		52 Keys
		Keys	POWER	Yes
			FUNCTION	Yes
			Source POWER	Yes
			DISPLAY	Yes
			LIGHT	Yes
			SEARCH+	Yes
			SEARCH-	Yes
			PLAY	Yes
			REC	Yes
			STOP	Yes
			PAUSE	Yes
			SKIP+	Yes
			SKIP-	Yes
			VIEW MODE	Yes
			1	Yes
			2	Yes
			3	Yes
			4	Yes
			5	Yes
			6	Yes
			7	Yes
			8	Yes
			9	Yes
			0	Yes
			.	Yes
			ENT	Yes
			INPUT	Yes
			FLASH BACK	Yes
			VOL+	Yes
			VOL-	Yes
			CH+	Yes
			CH-	Yes
			SURROUND	Yes
			MUTE	Yes
			FREEZE	Yes
			MENU	Yes
			LEFT	Yes
			ENTER	Yes
			RIGHT	Yes
			UP	Yes
			DOWN	Yes
			EXIT	Yes
			RETURN	Yes
			FAVORITE A	Yes
			FAVORITE B	Yes
			FAVORITE C	Yes
			FAVORITE D	Yes
			FAVORITE	Yes
			SLEEP	Yes
			AUDIO	Yes
			AV MODE	Yes
			CC	Yes

GENERAL SPECIFICATIONS

G-10	Features	Auto Shut Off		Yes
		Auto Search		No
		Power On Memory		No
		Comb Filter		Yes 3 -D
		Game Position		No
		Auto Setup(Language/CH Program)		No
		Picture Setting(TV)		Yes
			AV Mode(Picture Preference)	Yes
			Brightness , Contrast , Color	Yes
			Tint	Yes
			Sharpness	Yes
			Color Temperature	Yes
			Cable Clear	No
		Picture Setting(PC)		No
			BRIGHTNESS , CONTRAST	No
			HOR POSITION , VER POSITION	No
			PHASE , CLOCK	No
			AUTO ADJUST	No
			RED , GREEN , BLUE	No
		Audio	MTS	Yes
			Tone Control (Bass/Treble/Balance)	Yes
			Stable Sound	No
			Surround	No
			BBE	No
			SRS WOW (SRS 3D/Focus/Tru Bass)	Yes
			Valiable Audio Out	Yes
		Tuning	CH Program	Yes
			Air/Cable	Yes
			ADD/DELETE	Yes
		Label	CH Label	Yes
			Video Label	Yes
		Favorite CH		Yes
		V-Chip		Yes
			Type	USA Type
		RRT Setup		No
		Lock	Hotel Lock	No
			Channel Lock	No
			Video Lock	No
			Panel Lock	No
		OSD Language		English French Spanish
		Closed Caption		Yes
		CC Advanced		Yes
		View Mode (Picture Size)		Yes
		Picture Scroll		Yes
		Cinema Mode		Yes
		Aspect		Yes
		Backlight		Yes
		PFC(Power Factor circuit)		No
		Freeze frame		Yes
		PIP/POP		No
		Direct Input Selection		Yes
		Digital Out	Dolby Digital	Yes
			MPEG	No
			PCM	Yes
			DTS	No
		PC Monitor Input		No
			VGA (640x480)	No
			VGA (720x400)	No
			WVGA (848x480)	No
			SVGA (800x600)	No
			XGA (1024x768)	No
			WXGA (1280x768)	No
			WXGA (1280x720)	No
			WXGA (1360x768)	No
			SXGA (1280x1024)	No
		HDMI Input		Yes
			VGA (640x480)	Yes (60Hz)
			720x480i (4:3)	Yes (60Hz)
			720x480i (16:9)	Yes (60Hz)
			720x480p (4:3)	Yes (60Hz)
			720x480p (16:9)	Yes (60Hz)
			720x576i (4:3)	No
			720x576i (16:9)	No
			720x576p (4:3)	No
			720x576p (16:9)	No
			1280x720p	Yes (60Hz)
			1920x1080i	Yes (60Hz)
		Component Input		Yes
			720x480i (4:3)	Yes (60Hz)
			720x480i (16:9)	Yes (60Hz)
			720x480p (4:3)	Yes (60Hz)
			720x480p (16:9)	Yes (60Hz)
			720x576i (4:3)	No
			720x576i (16:9)	No
			720x576p (4:3)	No
			720x576p (16:9)	No
			1280x720p	Yes (60Hz)
			1920x1080i	Yes (60Hz)

GENERAL SPECIFICATIONS

G-11	**Accessories**	Owner's Manual		Language	English/French/Spanish
				w/Guarantee Card	Yes
		Remote Control Unit			Yes
		Rod Antenna			No
				Poles	--
				Terminal	--
		Loop Antenna			No
				Terminal	--
		U/V Mixer			No
		DC Car Cord (Center+)			No
		Guarantee Card			No
		Warning Sheet			No
		Circuit Diagram			No
		Antenna Change Plug			No
		Service Facility List			No
		Important Safeguard			No
		Dew/AHC Caution Sheet			No
		Quick Set-up Sheet			No
		Battery			Yes
				UM size x pcs	UM-4 x 2 pcs
				OEM Brand	No
		AC Adapter			No
		AC Cord (for AC Adapter)			No
		AC Cord (Flat Polarity Plugs)			Yes
		Cable Cramp			Yes
		Stand			Yes
		Stand Screw			Yes
		Hexagon Wrench			Yes
		AV Cord (2Pin-1Pin)			No
		Registration Card (NDL Card)			No
		300 to 75ohm Antenna Adapter			No
G-12	**Interface**	Switch	Top	Power (Tact)	Yes
				Channel Up/Menu Up	Yes
				Channel Down/Menu Down	Yes
				Volume Up/Menu >	Yes
				Volume Down/Menu <	Yes
				Menu	No
				Play	No
				Eject	No
				Skip+, Search+	No
				Skip-, Search-	No
				Still/Pause	No
				Stop	No
				Main Power SW	No
				Input Select	Yes
			Rear	Main Power SW	No
		Indicator		Power/Stand-By	Yes (Green / Red)
				On Timer	No
		Terminals	Rear	Video Input 1	RCA x 1
				Audio Input 1	RCA x 2(L/MONO, R)
				S - Input 1	Yes
				Video Input 2	RCA x 1
				Audio Input 2	RCA x 2(L/MONO, R)
				S - Input 2	Yes
				Video Output	No
				Audio Output	RCA x 2 (Variable) (L, R)
				Component Input 1	RCA x 3
				Analog Audio	RCA x 2(L/MONO, R)
				Component Input 2	RCA x 3
				Analog Audio	RCA x 2(L/MONO, R)
				HDMI Input 1	HDMI x 1
				Analog Audio	RCA x 2(L/MONO, R)
				HDMI Input 2	HDMI x 1
				Analog Audio	No
				Sub Woofer Out	No
				PC Monitor Input	No
				Analog Audio	No
				Digital Audio Output	Coaxial
				DC Jack (Center +)	No
				VHF/UHF Antenna Input	F Type
				AC Inlet	Yes
			Side	Video Input 3	No
				Audio Input 3	No
				S - Input 3	No
				Other Terminal	No
G-13	**Set Size**			Approx. W x D x H (mm)	821.0 x 273.5 x 648.5
				w/o Handle, Stand Approx. W x D x H (mm)	821.0 x 116 x 591.5

GENERAL SPECIFICATIONS

G-14	**Weight**		Net (Approx.)	19.5kg (43.0lbs)
			Net w/o Handle, Stand (Approx.)	17.0kg (37.5lbs)
			Gross (Approx.)	23.0kg (50.7lbs)
G-15	**Carton**	Master Carton		No
			Content	--- Sets
			Material	--- / ---
			Dimensions W x D x H(mm)	---
			Description of Origin	---
		Gift Box	Material	Double/Brown
			W/Color Photo Label	No
			W/Handle	No
			Dimensions W x D x H(mm)	917 x 271 x 716
			Description of Origin	Yes
		Drop Test		1 Corner / 3 Edges / 6 Surfaces
			Height (cm)	32(ORION SPEC:46)
		Container Stuffing (40' container)		327 Sets/40' container
G-16	**Material**	Cabinet	Front	PS 94V0 NON-DECABROM
			Rear	PS 94V0 NON-DECABROM
			Jack Panel	--
		PCB	Non-Halogen Demand	No
			Eyelet Demand	Yes
G-17	**Environment**	Environmental standard requirement		Green procurement of SHARP
		Pb-free		Phase3(Phase3A)
			Measures for Whisker	Yes
		Rohs		Yes

DISASSEMBLY INSTRUCTIONS

1. REMOVAL AND INSTALLATION OF FLAT PACKAGE IC

REMOVAL

1. Put Masking Tape (cotton tape) around the Flat Package IC to protect other parts from any damage. **(Refer to Fig. 1-1.)**

   NOTE

   Masking is carried out on all the parts located within 10 mm distance from IC leads.

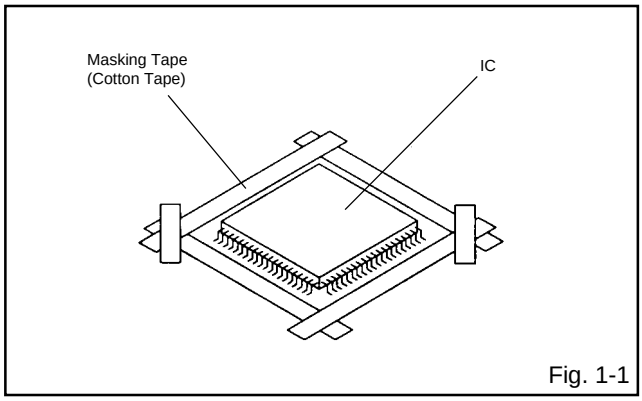


Fig. 1-1

2. Heat the IC leads using a blower type IC desoldering machine. **(Refer to Fig. 1-2.)**

   NOTE

   Do not rotate or move the IC back and forth , until IC can move back and forth easily after desoldering the leads completely.

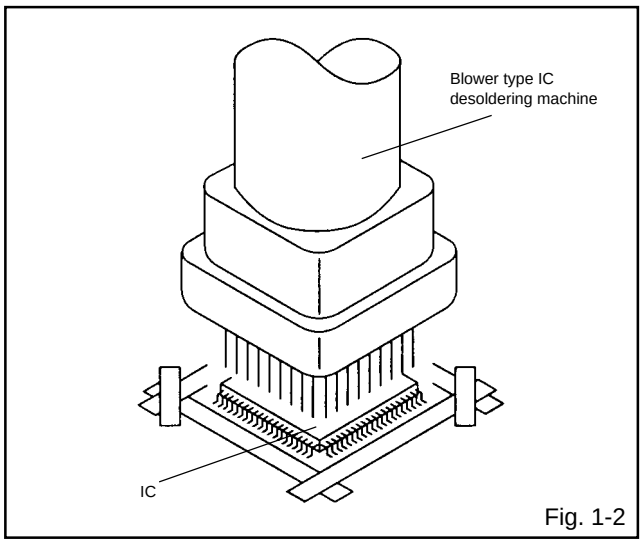


Fig. 1-2

3. When IC starts moving back and forth easily after desoldering completely, pickup the corner of the IC using tweezers and remove the IC by moving with the IC desoldering machine. **(Refer to Fig. 1-3.)**

   NOTE

   Some ICs on the PCB are affixed with glue, so be careful not to break or damage the foil of each IC leads or solder lands under the IC when removing it.

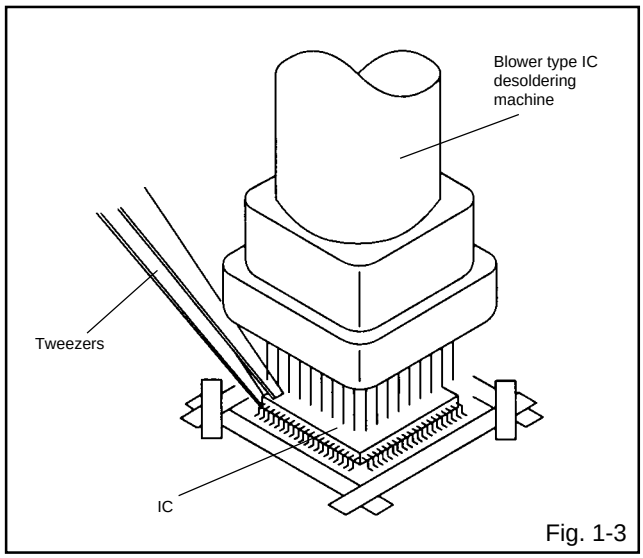


Fig. 1-3

4. Peel off the Masking Tape.

5. Absorb the solder left on the pattern using the Braided Shield Wire. **(Refer to Fig. 1-4.)**

   NOTE

   Do not move the Braided Shield Wire in the vertical direction towards the IC pattern.

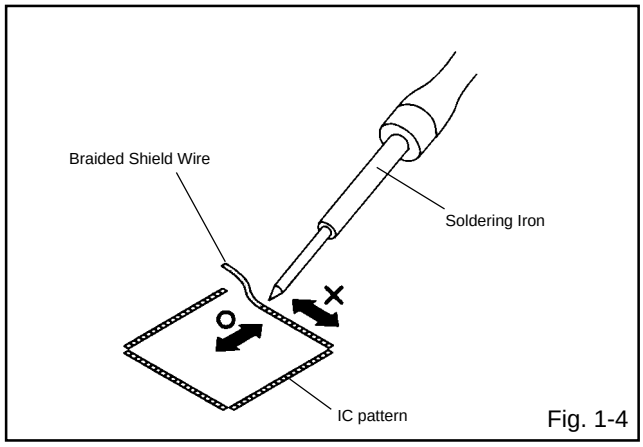


Fig. 1-4

DISASSEMBLY INSTRUCTIONS

INSTALLATION

1. Take care of the polarity of new IC and then install the new IC fitting on the printed circuit pattern. Then solder each lead on the diagonal positions of IC temporarily. **(Refer to Fig. 1-5.)**

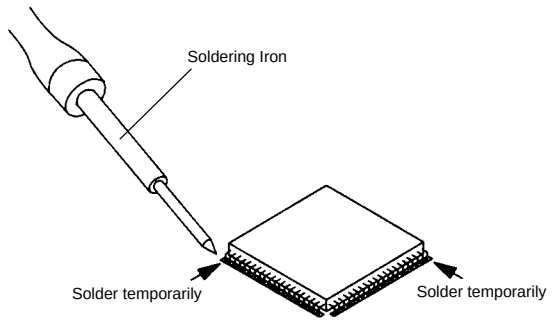


Fig. 1-5

2. Supply the solder from the upper position of IC leads sliding to the lower position of the IC leads. **(Refer to Fig. 1-6.)**

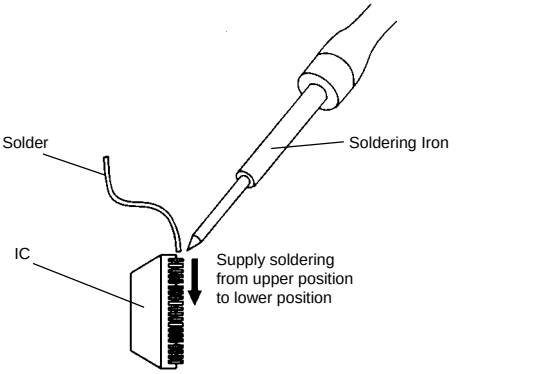


Fig. 1-6

3. Absorb the solder left on the lead using the Braided Shield Wire. **(Refer to Fig. 1-7.)**

   NOTE

   Do not absorb the solder to excess.

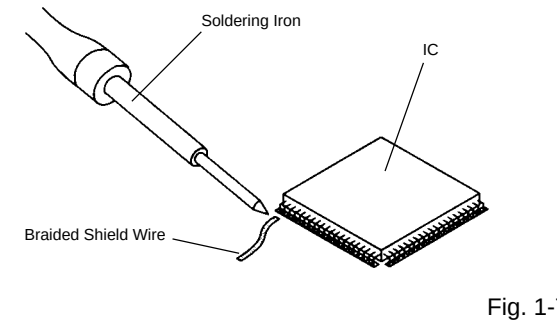


Fig. 1-7

4. When bridge-soldering between terminals and/or the soldering amount are not enough, resolder using a Thin-tip Soldering Iron. **(Refer to Fig. 1-8.)**

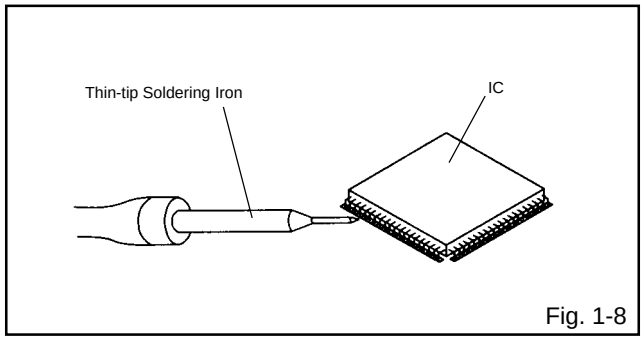


Fig. 1-8

5. Finally, confirm the soldering status on four sides of the IC using a magnifying glass.
   Confirm that no abnormality is found on the soldering position and installation position of the parts around the IC. If some abnormality is found, correct by resoldering.

   NOTE

   When the IC leads are bent during soldering and/or repairing, do not repair the bending of leads. If the bending of leads are repaired, the pattern may be damaged. So, always be sure to replace the IC in this case.

SERVICE MODE LIST

This unit is provided with the following SERVICE MODES so you can repair, examine and adjust easily.

To enter to the SERVICE MODE function, press and hold both buttons simultaneously on the main unit and on the remote control for more than the standard time in the appropriate condition. (See below chart.)

Set Condition	Set Key	Remocon Key	Standard Time	Operations
TV mode	VOL. DOWN (Minimum)	0	2 sec.	Releasing of V-CHIP PASSWORD.
TV mode	VOL. DOWN (Minimum)	1	2 sec.	Initialization of factory TV data. NOTE: If you set factory initialization, the memories are reset such as the channel setting, and the POWER ON total hours.
TV mode	VOL. DOWN (Minimum)	6	2 sec.	Can be checked of the INITIAL DATA of MEMORY IC. Refer to the "WHEN REPLACING EEPROM (MEMORY) IC".
ALL mode	VOL. DOWN (Minimum)	8	2 sec.	Check of the SUM DATA, POWER ON total hours, MICON VERSION and DIGITAL TV MICON FIRMWARE on the screen. Refer to the "WHEN REPLACING EEPROM (MEMORY) IC".
ALL mode	VOL. DOWN (Minimum)	9	2 sec.	Display of the Adjustment MENU on the screen. Refer to the "ELECTRICAL ADJUSTMENT" (On-Screen Display Adjustment).

WHEN REPLACING EEPROM (MEMORY) IC

CONFIRMATION OF CHECK SUM, POWER ON TOTAL HOURS, MICON VERSION AND DIGITAL TV MICON FIRMWARE

Initial total of MEMORY IC, POWER ON total hours, MICON VERSION and Digital TV MICON Firmware can be checked on the screen. Total hours are displayed in 16 system of notation.

NOTE: If you set a factory initialization, the total hours is reset to "0".
Please refer to "CONFIRMATION OF INITIAL DATA" when SUM DATA is not corresponding.

1. Turn on the POWER, and set to the TV mode.
2. Set the VOLUME to minimum.
3. Press both VOL. DOWN button on the set and Channel button **(8)** on the remote control for more than 2 seconds.
4. After the confirmation of each check sum, POWER ON total hours, MICON VERSION and Digital TV MICON Firmware, turn off the power.

   *1 DVP1 is different according to each set.

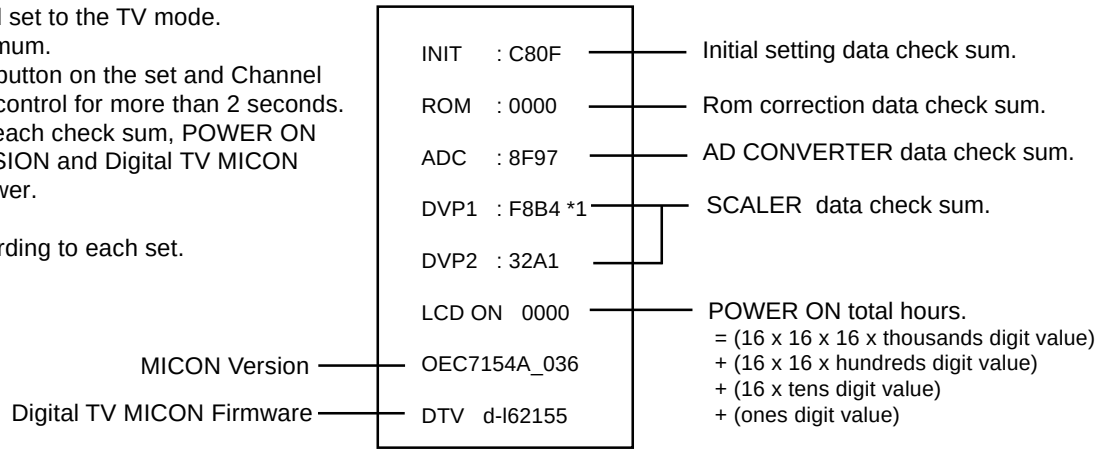

INIT : C80F
Initial setting data check sum.
ROM : 0000
Rom correction data check sum.
ADC : 8F97
AD CONVERTER data check sum.
DVP1 : F8B4 *1
SCALER data check sum.
DVP2 : 32A1
LCD ON 0000
POWER ON total hours.
= (16 x 16 x 16 x thousands digit value)
+ (16 x 16 x hundreds digit value)
+ (16 x tens digit value)
+ (ones digit value)
MICON Version
OEC7154A_036
Digital TV MICON Firmware
DTV d-I62155

FIG. 1

CONFIRMATION OF INITIAL DATA

If a service repair is undertaken where it has been required to change the MEMORY IC, the following steps should be taken to ensure correct data settings while making reference to INITIAL SETTING TABLE (Attached "INITIAL DATA").

1. Turn on the POWER, and set to the TV mode.
2. Set the VOLUME to minimum.
3. Press both VOL. DOWN button on the set and Channel button **(6)** on the remote control for more than 2 seconds. ADDRESS and DATA should appear as FIG 2.

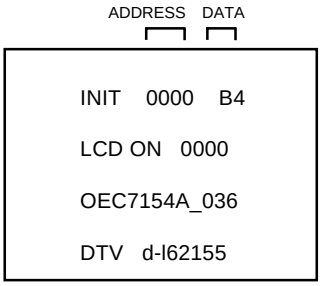


FIG. 2

4. ADDRESS is now selected and should "blink". Using the UP/DOWN buton on the remote, step through the ADDRESS until required ADDRESS to be changed is reached.
5. Press RIGHT/LEFT button to select DATA. When DATA is selected, it will "blink".
6. Again, step through the DATA using UP/DOWN button until required DATA value has been selected.
7. Pressing RIGHT/LEFT button will take you back to ADDRESS for further selection if necessary.
8. Repeat steps 4 to 6 until all data has been checked.
9. When satisfied correct DATA has been entered, turn POWER off (return to STANDBY MODE) to finish DATA input.

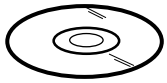
After the data input, set to the initializing of shipping.

10. Turn POWER on.
11. Press both VOL. DOWN button on the set and Channel button **(1)** on the remote control for more than 2 seconds.
12. After the finishing of the initializing of shipping, the unit will turn off automatically.

The unit will now have the correct DATA for the new MEMORY IC.

RE-WRITE FOR DIGITAL SOFT FIRMWARE

JG176 USA HD DTV ROM DISC



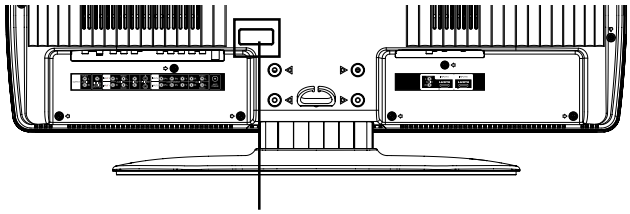
Ref. No.	Part No.	Parts Name	Remarks
JG176	APJG176095	USA HD DTV ROM DISC	Up-Date of the Firmware

NOTE: The operating manual for Re-writing is included in USA HD DTV ROM DISC (JG176).

Prepare the following tools for Up-Date of the Firmware.

1 Computer of WINDOWS2000
2 USB Flash Memory **(Use only SanDisk Cruzer Mini USB Flash Drive 256Mb)**

SET (REAR)



USB CONNECTOR

ELECTRICAL ADJUSTMENTS

1. ADJUSTMENT PROCEDURE

Read and perform these adjustments when repairing the circuits or replacing electrical parts or PCB assemblies.

CAUTION

- Use an isolation transformer when performing any service on this chassis.
- When removing a PCB or related component, after unfastening or changing a wire, be sure to put the wire back in its original position.
- When you exchange IC and Transistor with a heat sink, apply silicon grease **(YG6260M)** on the contact section of the heat sink. Before applying new silicon grease, remove all the old silicon grease. (Old grease may cause damage to the IC and Transistor).

Prepare the following measurement tools for electrical adjustments.

1. Pattern Generator

2. BASIC ADJUSTMENTS

On-Screen Display Adjustment

1. Set the VOLUME to minimum.
2. Press the VOL. DOWN button on the set and the channel button **(9)** on the remote control for more than 2 seconds to display adjustment mode on the screen as shown in **Fig. 2-1**.

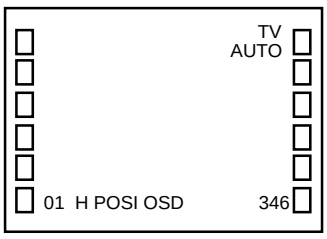


Fig. 2-1

3. Use the UP/DOWN button or Channel button **(0-9)** on the remote control to select the options shown in **Fig. 2-2**.
4. Press the MENU button on the remote control to end the adjustments.
5. To display the adjustment screen for AV, CS, HDMI mode, press the INPUT button on the remote control to set to the AV, CS, HDMI mode. Press the VOL.DOWN button on the set and the channel **(9)** on the remote control for more than 2 seconds.

NO.	FUNCTION	NO.	FUNCTION
01	H POSI OSD	22	H POSI 60Hz
02	V POSI OSD	24	V POSI 60Hz
03	R DRIVE (N)	25	BAK LIGHT CENT
04	R CUTOFF (N)	26	BAK LIGHT MAX
05	G DRIVE (N)	27	BAK LIGHT MIN
06	G CUTOFF (N)	28	BRIGHT CENT
07	B DRIVE (N)	29	BRIGHT MAX
08	B CUTOFF (N)	30	BRIGHT MIN
09	R DRIVE (C)	31	TINT
10	R CUTOFF (C)	35	CONTRAST CENTER
11	G DRIVE (C)	36	CONTRAST MAX
12	G CUTOFF (C)	37	CONTRAST MIN
13	B DRIVE (C)	38	COLOR CENT
14	B CUTOFF (C)	39	COLOR MAX
15	R DRIVE (W)	40	COLOR MIN
16	R CUTOFF (W)	63	CONTRAST 40
17	G DRIVE (W)	64	BRIGHT (3F54)
18	G CUTOFF (W)	65	CONTRASR (3F54)
19	B DRIVE (W)	66	SRC TOP
20	B CUTOFF (W)	67	DFEA VIMGVT

Fig. 2-2

2-1: WHITE BALANCE

1. Place the set in Aging Test for more than 15 minutes.
2. Receive the gray scale pattern from the Pattern Generator.
3. Press the INPUT button on the remote control to set to the AV mode.
4. Using the remote control, set the brightness and contrast to normal position.
5. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(03)** on the remote control to select “R DRIVE (N)”.
6. Press the UP/DOWN button on the remote control to select the “R CUTOFF (N)”, “B DRIVE (N)”, “B CUTOFF (N)”, “R DRIVE (C)”, “R CUTOFF (C)”, “B DRIVE (C)”, “B CUTOFF (C)”, “R DRIVE (W)”, “R CUTOFF (W)”, “B DRIVE (W)” and “B CUTOFF (W)”.
7. Adjust the RIGHT/LEFT button on the remote control to whiten the R CUTOFF (N), B DRIVE (N), B CUTOFF (N), R DRIVE (C), R CUTOFF (C), B DRIVE (C), B CUTOFF (C), R DRIVE (W), R CUTOFF (W), B DRIVE (W) and B CUTOFF (W) at each step tone sections equally.
8. Perform the above adjustments 5 and 6 until the white color is looked like a white.

ELECTRICAL ADJUSTMENTS

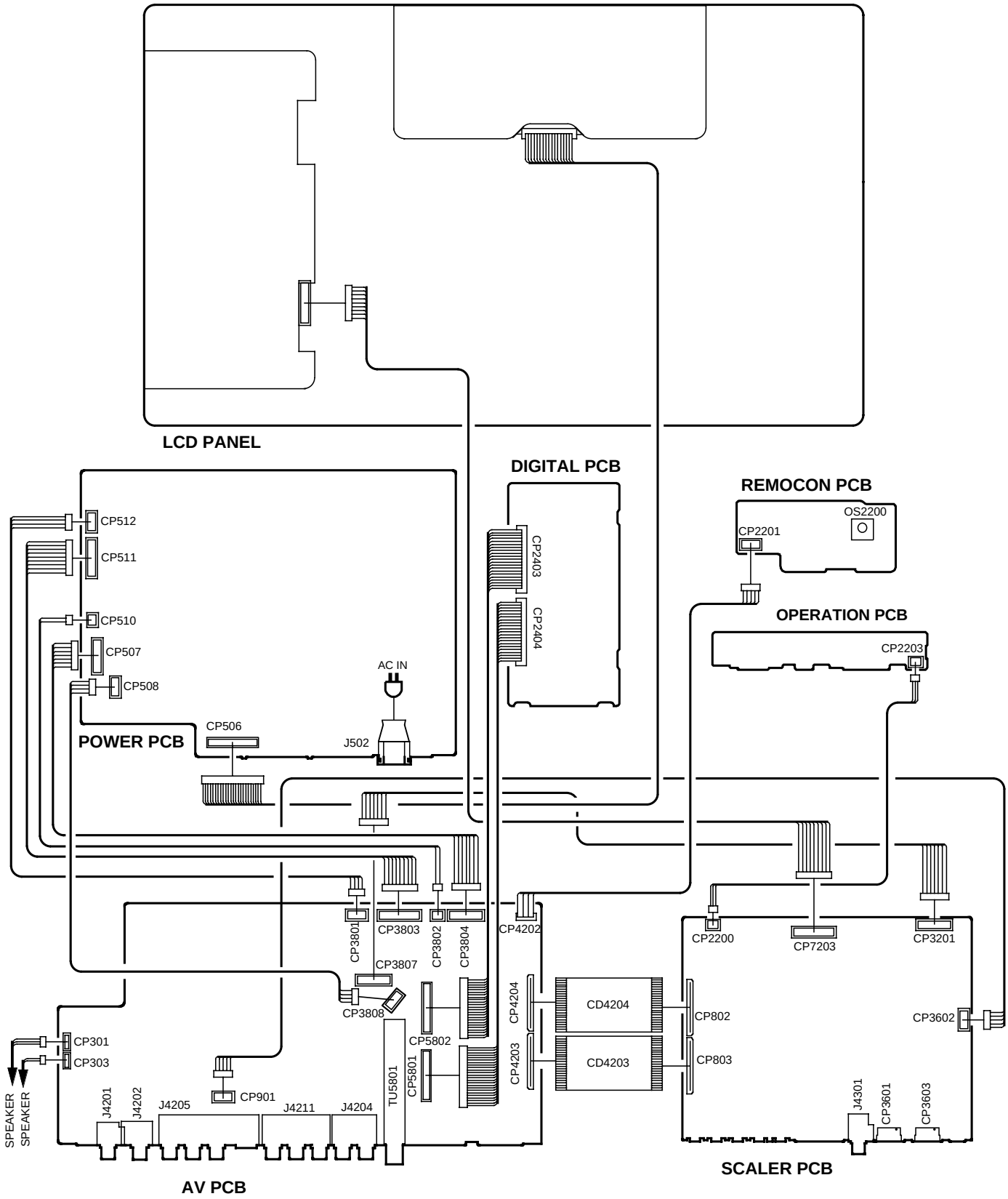
2-2: Confirmation of Fixed Value (Step No.)

Please check if the fixed values of each of the adjustment items are set correctly referring below. **(TV/AV/CS/HD-MI)**

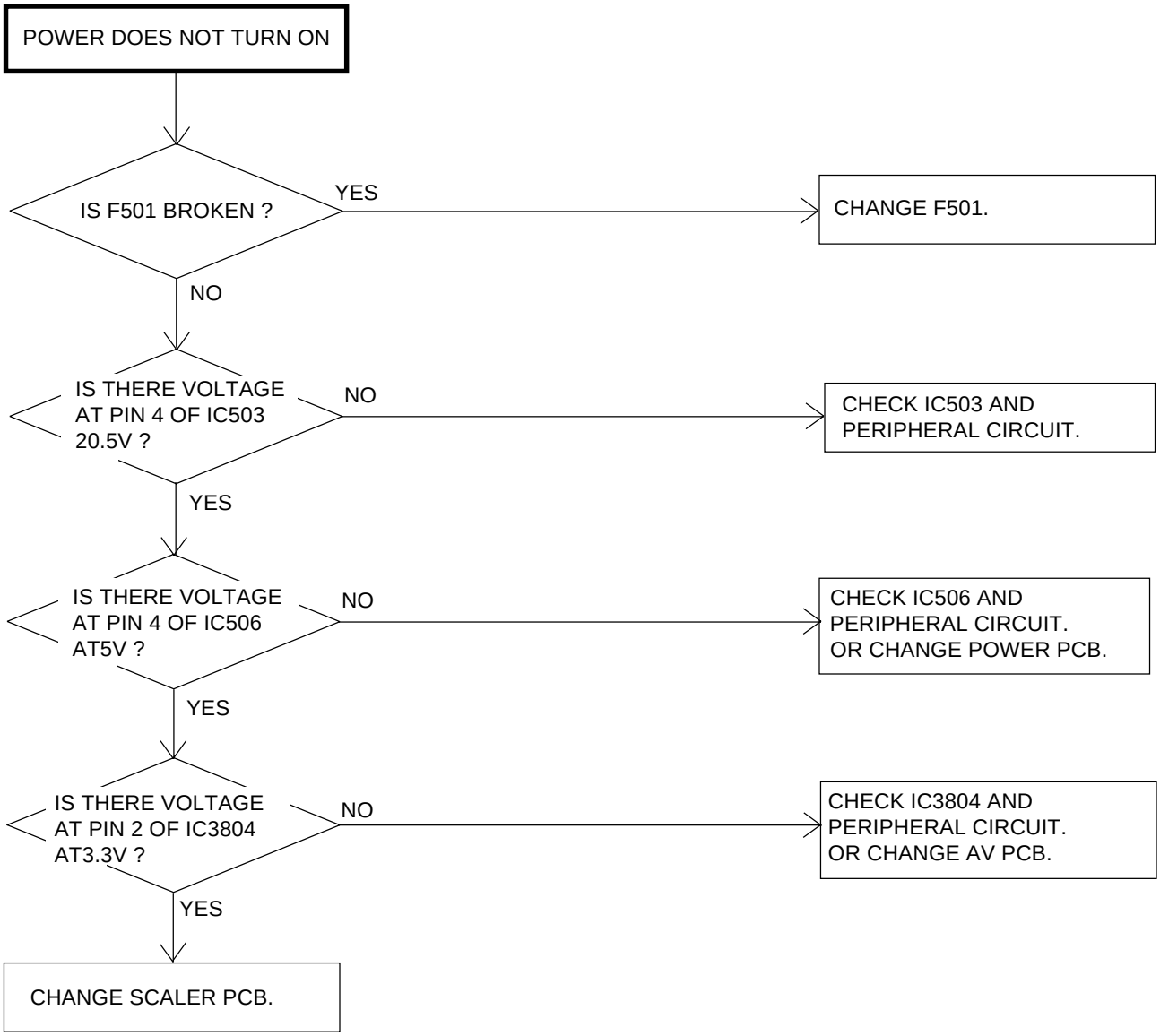
						CS				HD-MI				
		TV	TV 720p	AV	AV (S)	480i	480p	720p	1080i	480i	480p	720p	1080i	VGA
NO.	FUNCTION	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.
1	H POSI OSD	346	346	346	346	346	346	346	346	346	346	346	346	346
2	V POSI OSD	85	85	85	85	85	85	85	85	85	85	85	85	85
5	G DRIVE (N)	128	128	128	128	128	128	128	128	128	128	128	128	128
6	G CUTOFF (N)	128	128	128	128	128	128	128	128	128	128	128	128	128
11	G DRIVE (C)	128	128	128	128	128	128	128	128	128	128	128	128	128
12	G CUTOFF (C)	128	128	128	128	128	128	128	128	128	128	128	128	128
17	G DRIVE (W)	128	128	128	128	128	128	128	128	128	128	128	128	128
18	G CUTOFF (W)	128	128	128	128	128	128	128	128	128	128	128	128	128
22	H POSI 60Hz	284	326	284	284	284	138	328	132	272	138	290	238	158
24	V POSI 60Hz	34	59	34	34	34	34	56	42	36	35	62	42	35
25	BAK LIGHT CENT	128	128	128	128	128	128	128	128	128	128	128	128	128
26	BAK LIGHT MAX	255	255	255	255	255	255	255	255	255	255	255	255	255
27	BAK LIGHT MIN	00	00	00	00	00	00	00	00	00	00	00	00	00
28	BRIGHT CENT	126	126	126	126	126	126	126	126	126	126	126	126	126
29	BRIGHT MAX	156	156	156	156	156	156	156	156	156	156	156	156	156
30	BRIGHT MIN	70	70	70	70	70	70	70	70	70	70	70	70	70
31	TINT	128	128	114	120	128	128	128	128	132	132	132	132	132
35	CONTRAST CENTER	---	---	---	---	---	---	---	---	119	119	119	116	119
36	CONTRAST MAX	---	---	---	---	---	---	---	---	164	164	164	164	164
37	CONTRAST MIN	---	---	---	---	---	---	---	---	50	50	50	50	50
38	COLOR CENT	70	110	88	80	83	104	440	440	73	73	73	73	73
39	COLOR MAX	127	127	127	127	127	127	127	127	127	127	127	127	127
40	COLOR MIN	00	00	00	00	00	00	00	00	00	00	00	00	00
63	CONTRAST 40	---	---	---	---	---	---	---	---	156	156	156	156	156
64	BRIGHT (3F54)	121	128	123	122	122	128	128	128	118	117	118	118	113
65	CONTRAST (3F54)	---	---	---	---	---	170	170	170	113	113	113	113	118
66	SRC TOP	21	21	21	21	21	21	21	21	21	21	21	21	21
67	SRC TOP	21	28	21	21	21	45	29	27	21	44	28	28	43

ELECTRICAL ADJUSTMENTS

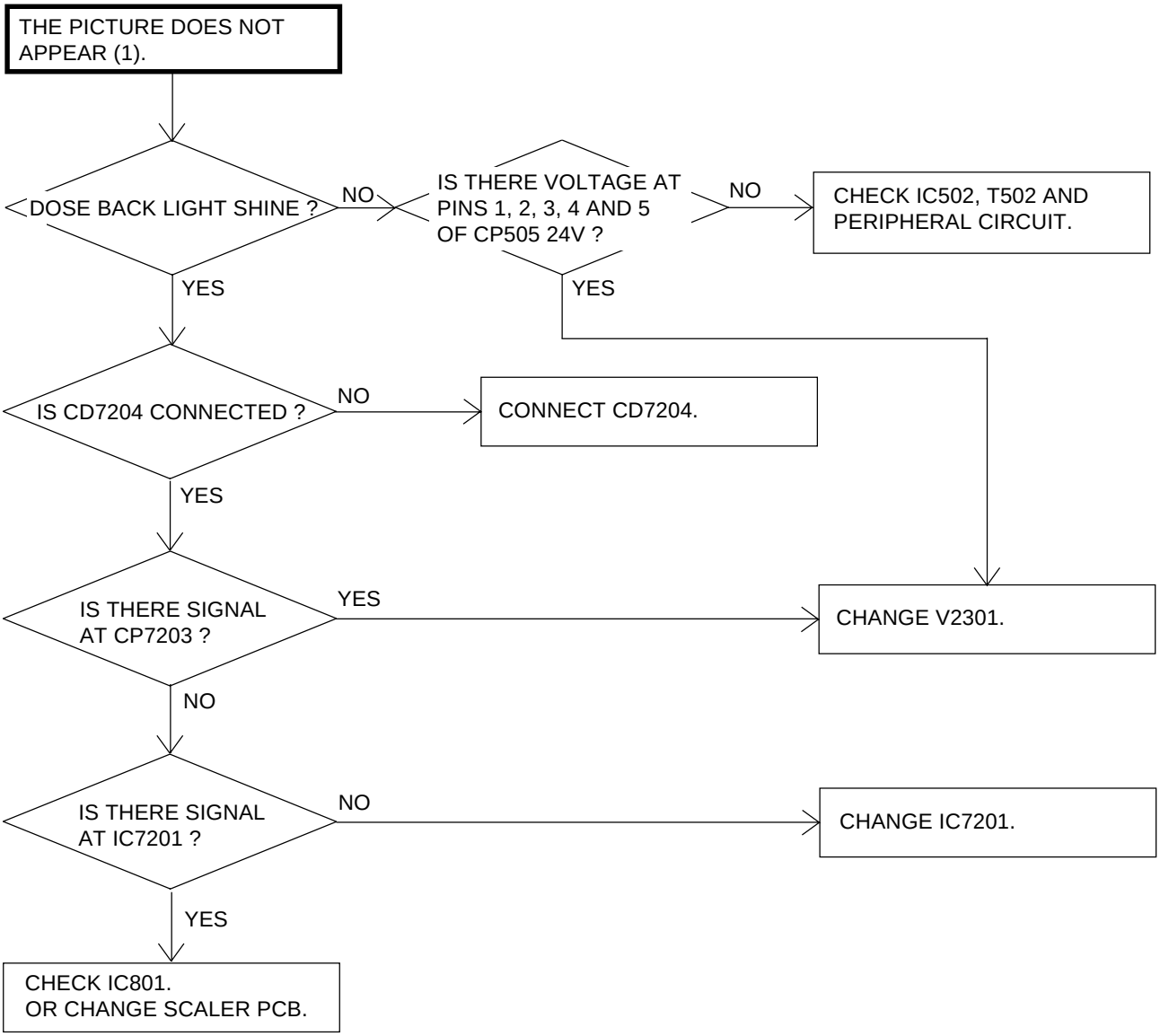
3. ELECTRICAL ADJUSTMENT PARTS LOCATION GUIDE (WIRING CONNECTION)



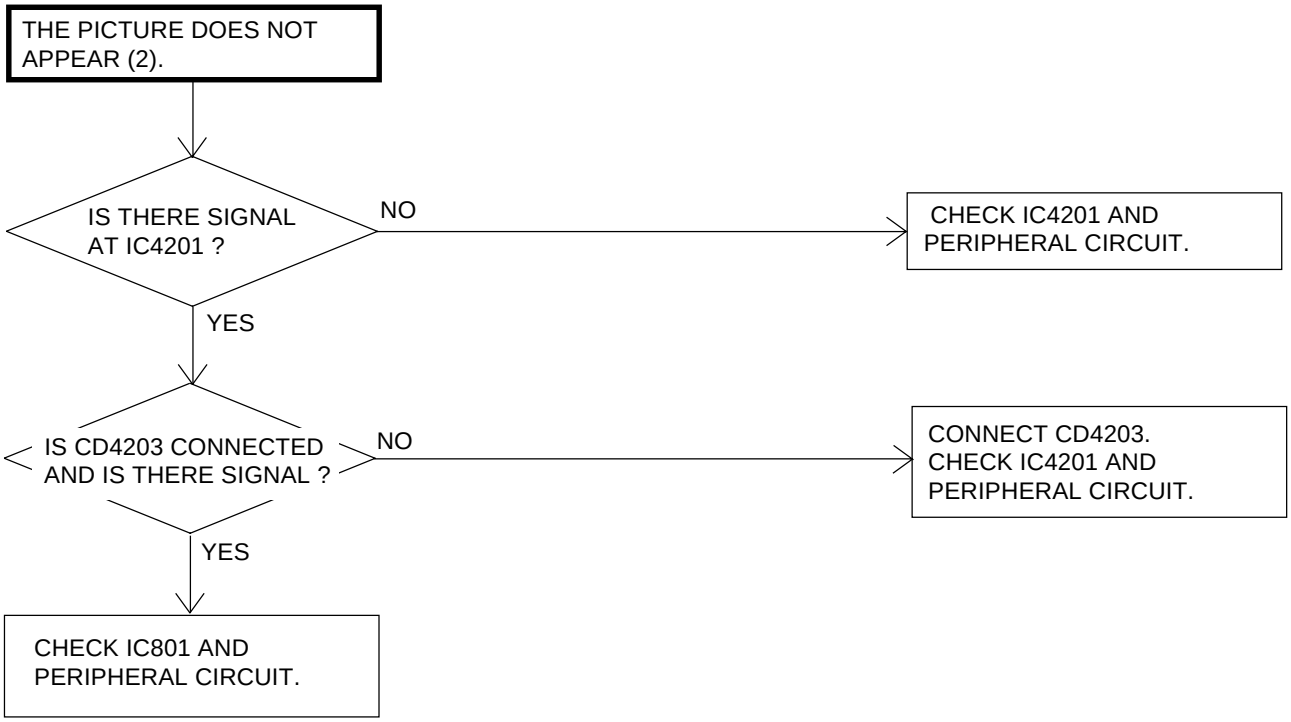
TROUBLESHOOTING GUIDE


POWER DOES NOT TURN ON
IS F501 BROKEN ?
YES
CHANGE F501.
NO
IS THERE VOLTAGE AT PIN 4 OF IC503 20.5V ?
NO
CHECK IC503 AND PERIPHERAL CIRCUIT.
YES
IS THERE VOLTAGE AT PIN 4 OF IC506 AT5V ?
NO
CHECK IC506 AND PERIPHERAL CIRCUIT. OR CHANGE POWER PCB.
YES
IS THERE VOLTAGE AT PIN 2 OF IC3804 AT3.3V ?
NO
CHECK IC3804 AND PERIPHERAL CIRCUIT. OR CHANGE AV PCB.
YES
CHANGE SCALER PCB.

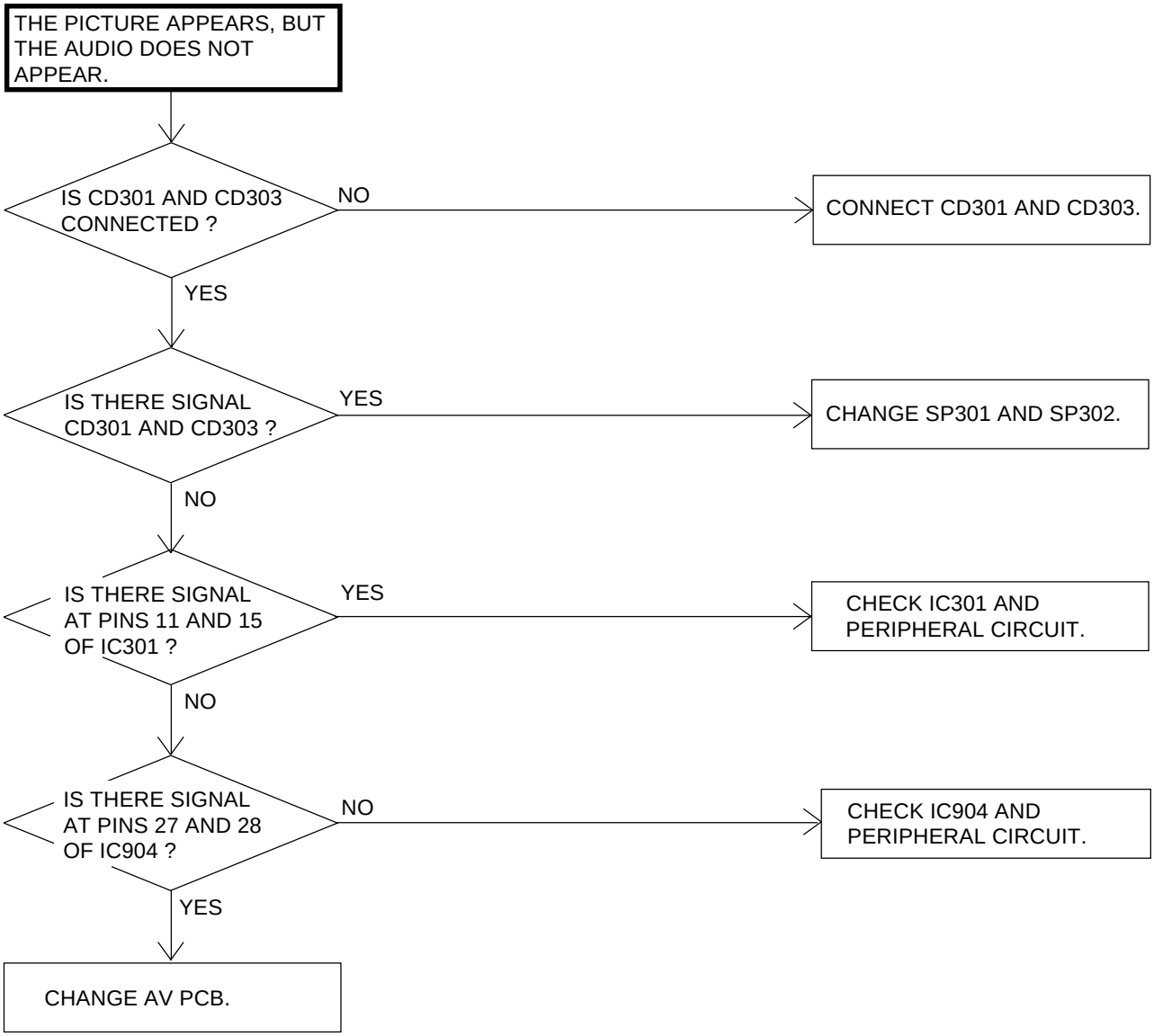
TROUBLESHOOTING GUIDE



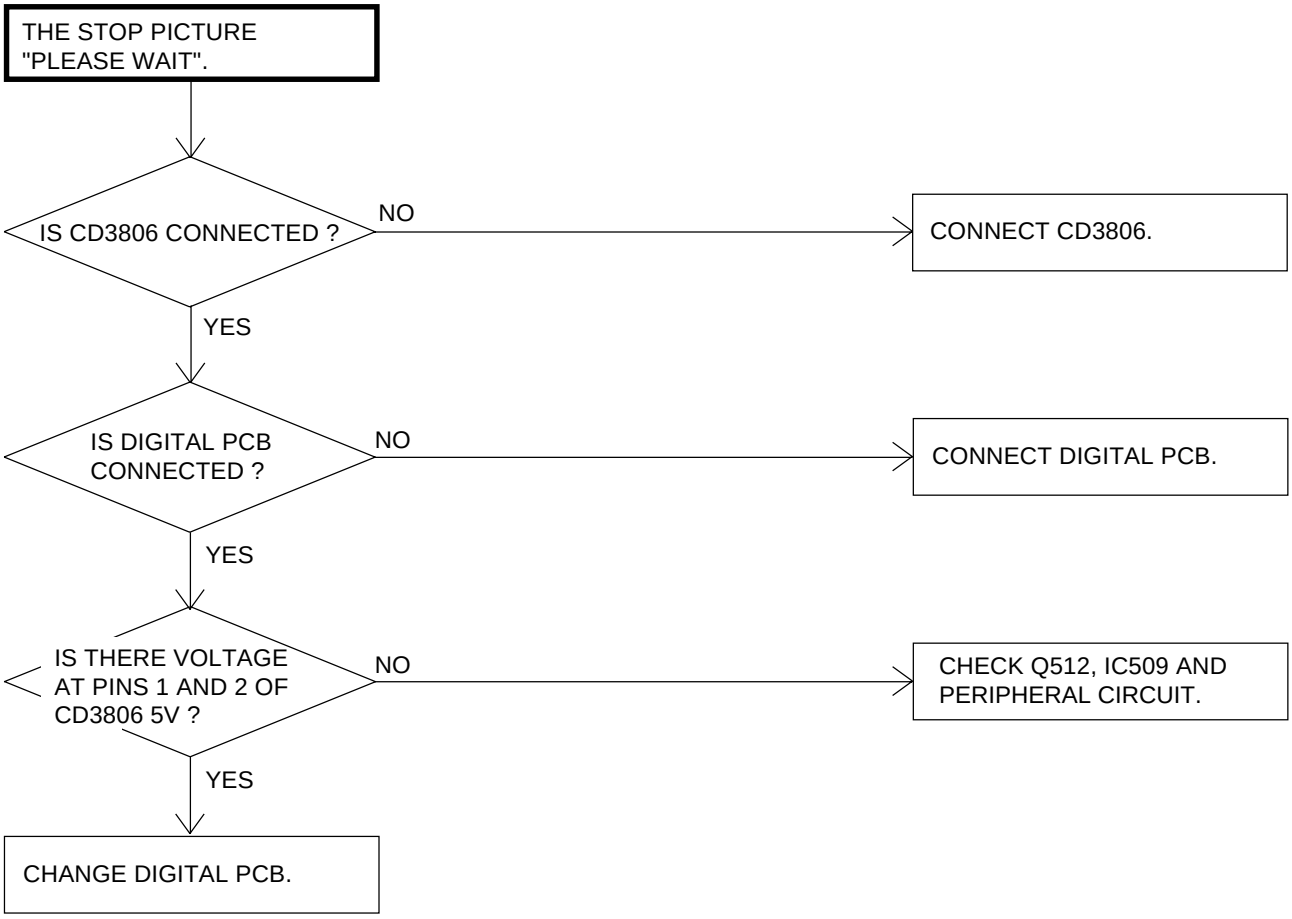
TROUBLESHOOTING GUIDE


THE PICTURE DOES NOT APPEAR (2).
IS THERE SIGNAL AT IC4201 ?
NO
CHECK IC4201 AND PERIPHERAL CIRCUIT.
YES
IS CD4203 CONNECTED AND IS THERE SIGNAL ?
NO
CONNECT CD4203. CHECK IC4201 AND PERIPHERAL CIRCUIT.
YES
CHECK IC801 AND PERIPHERAL CIRCUIT.

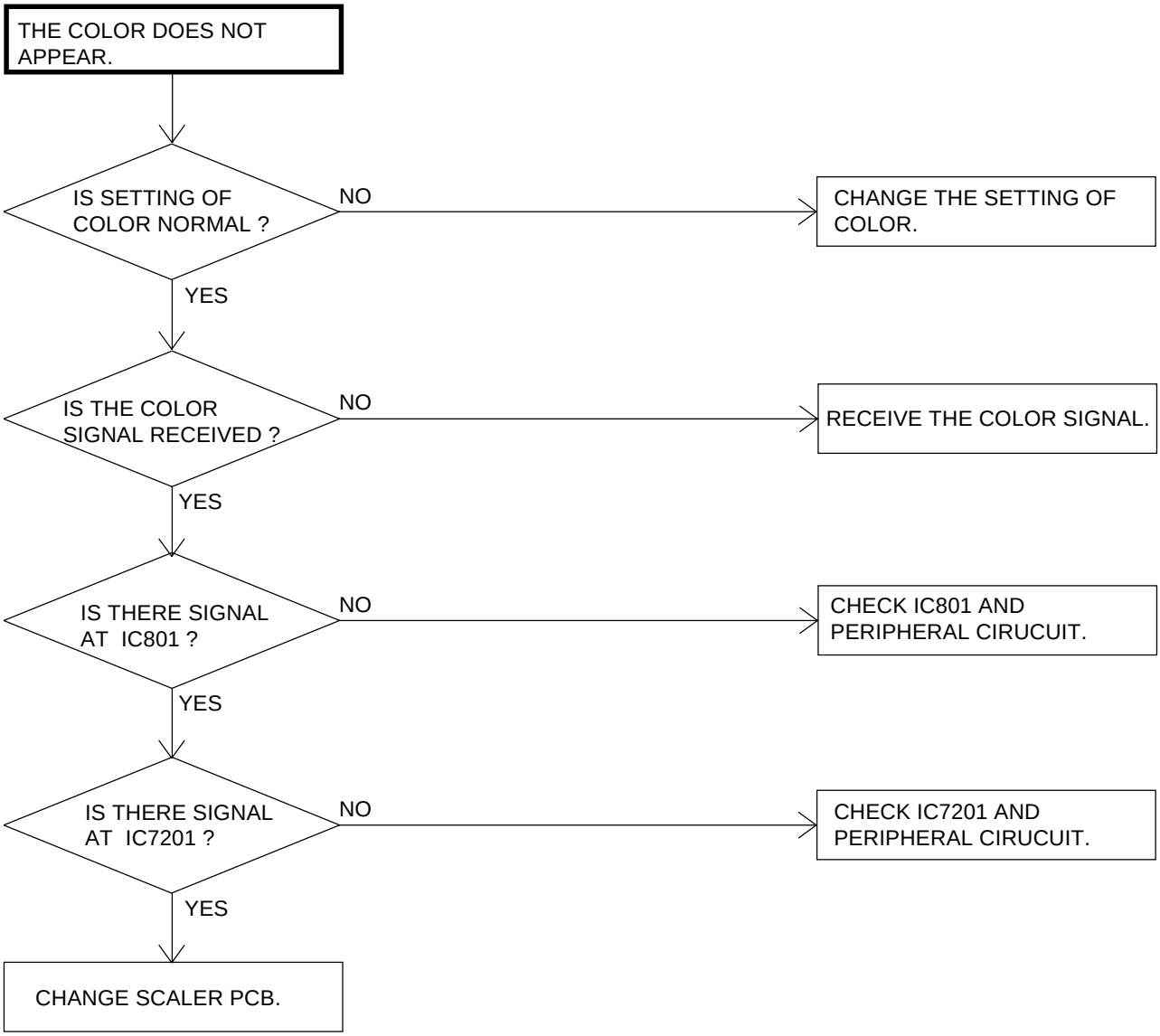
TROUBLESHOOTING GUIDE


THE PICTURE APPEARS, BUT THE AUDIO DOES NOT APPEAR.
IS CD301 AND CD303 CONNECTED ?
NO
CONNECT CD301 AND CD303.
YES
IS THERE SIGNAL CD301 AND CD303 ?
YES
CHANGE SP301 AND SP302.
NO
IS THERE SIGNAL AT PINS 11 AND 15 OF IC301 ?
YES
CHECK IC301 AND PERIPHERAL CIRCUIT.
NO
IS THERE SIGNAL AT PINS 27 AND 28 OF IC904 ?
NO
CHECK IC904 AND PERIPHERAL CIRCUIT.
YES
CHANGE AV PCB.

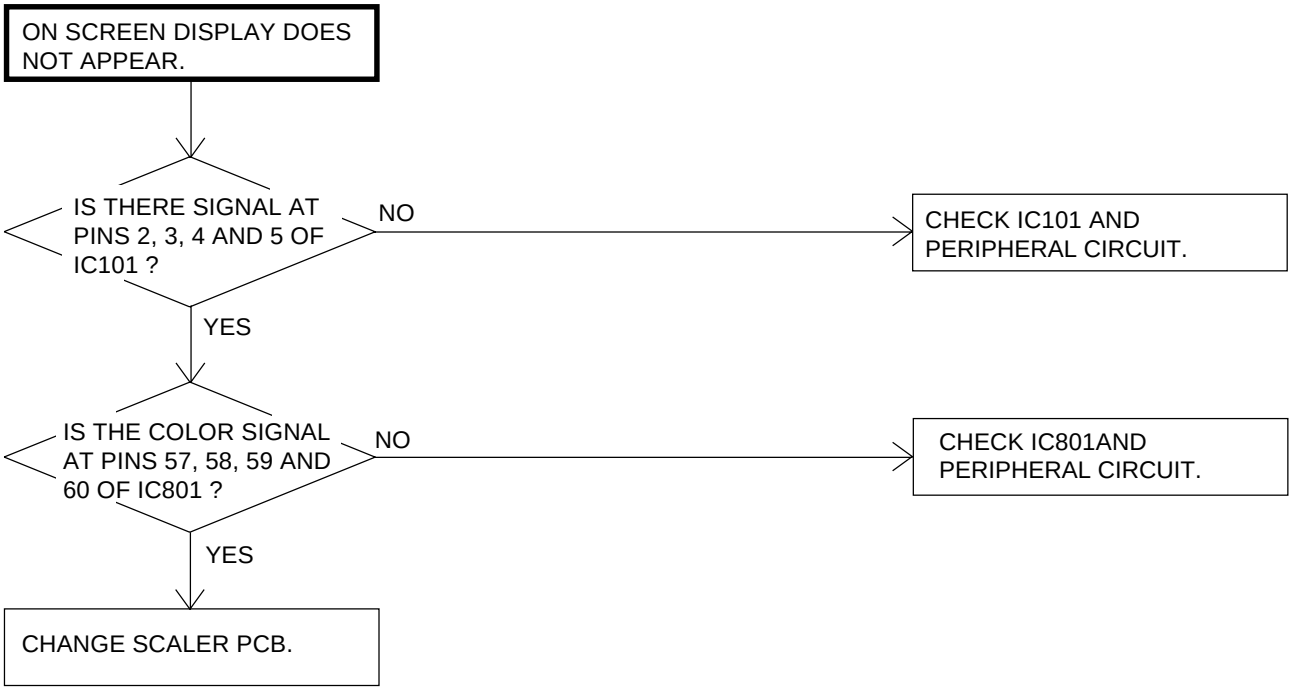
TROUBLESHOOTING GUIDE



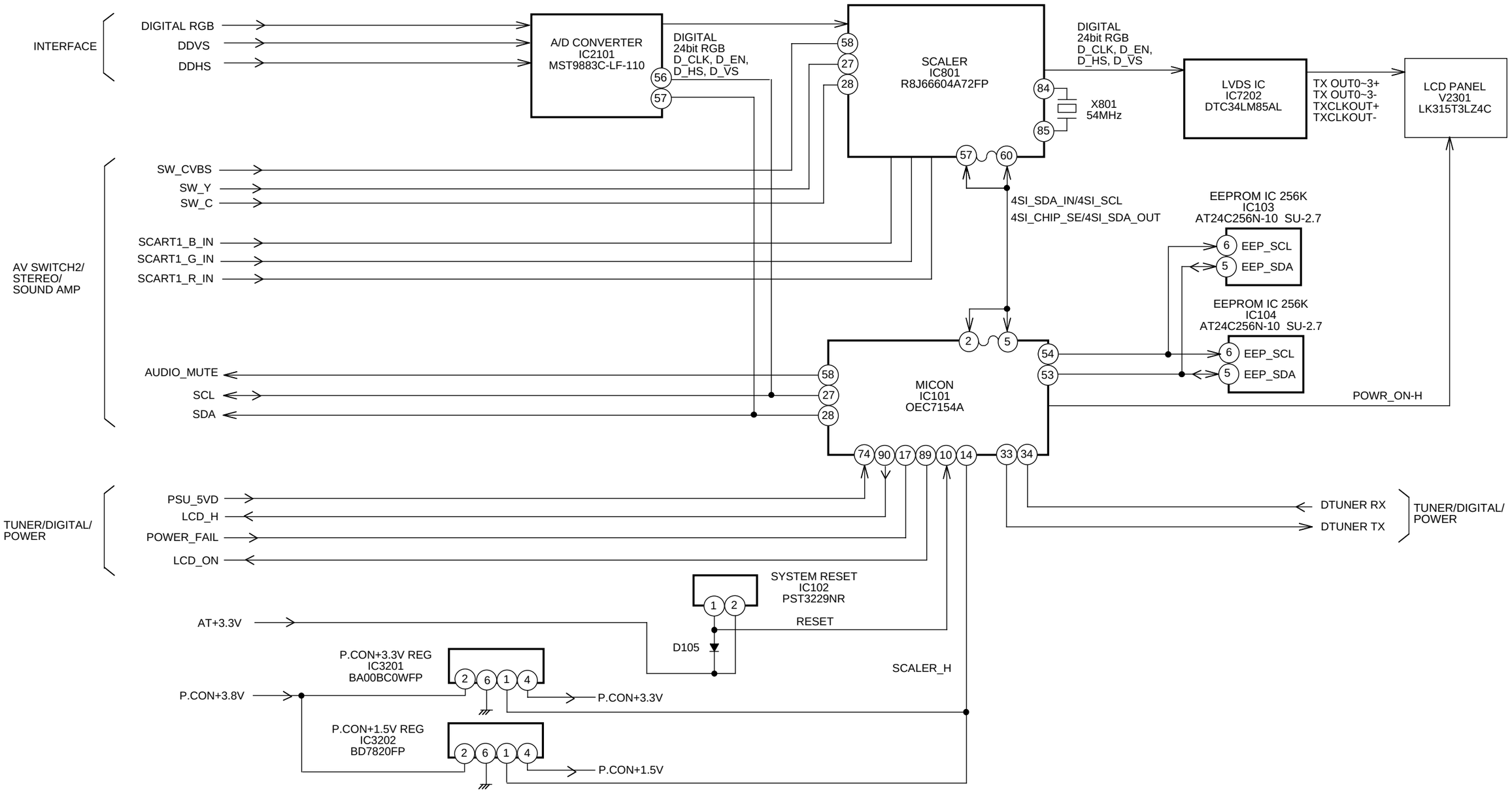
TROUBLESHOOTING GUIDE



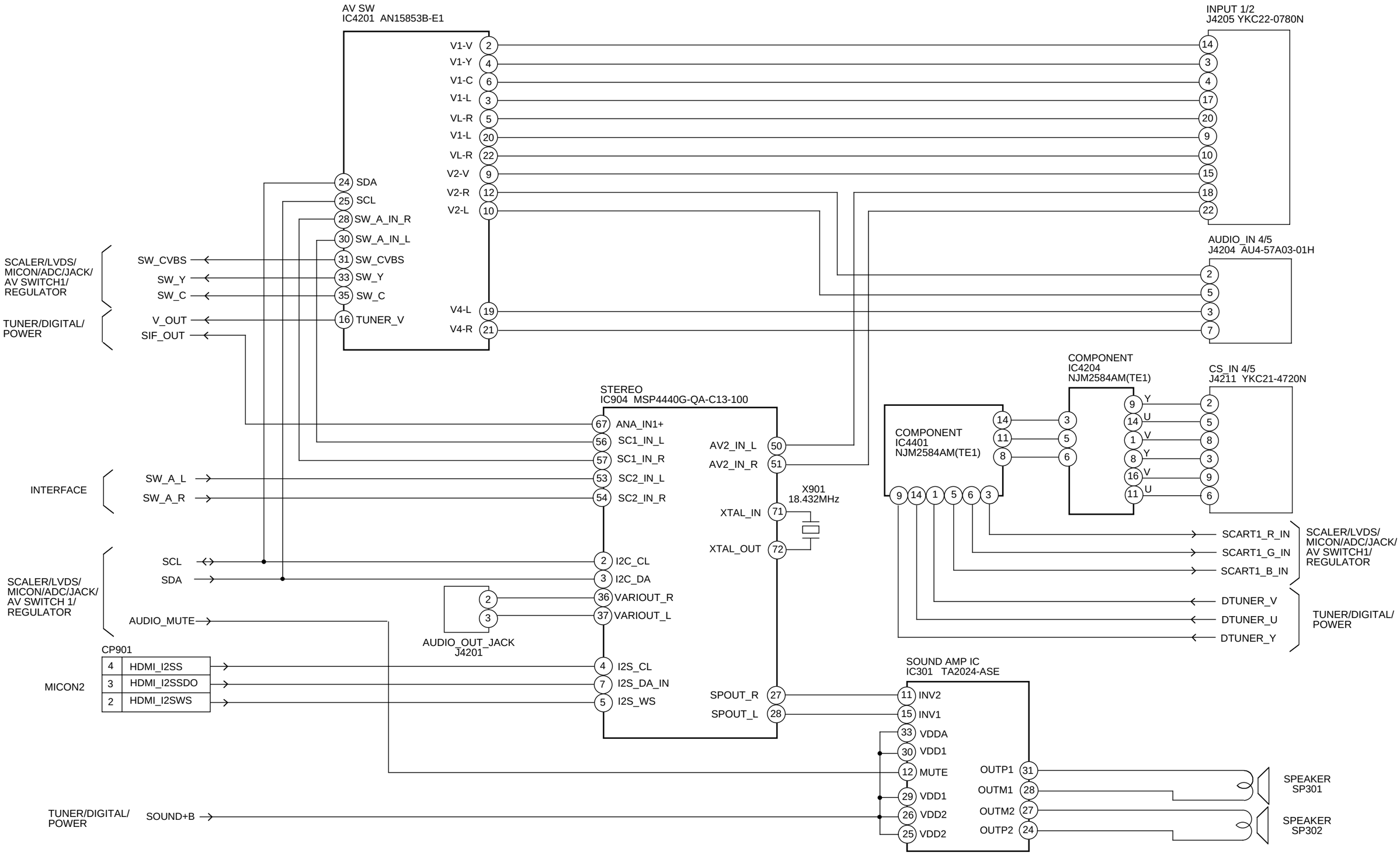
TROUBLESHOOTING GUIDE


ON SCREEN DISPLAY DOES NOT APPEAR.
IS THERE SIGNAL AT PINS 2, 3, 4 AND 5 OF IC101 ?
NO
CHECK IC101 AND PERIPHERAL CIRCUIT.
YES
IS THE COLOR SIGNAL AT PINS 57, 58, 59 AND 60 OF IC801 ?
NO
CHECK IC801AND PERIPHERAL CIRCUIT.
YES
CHANGE SCALER PCB.

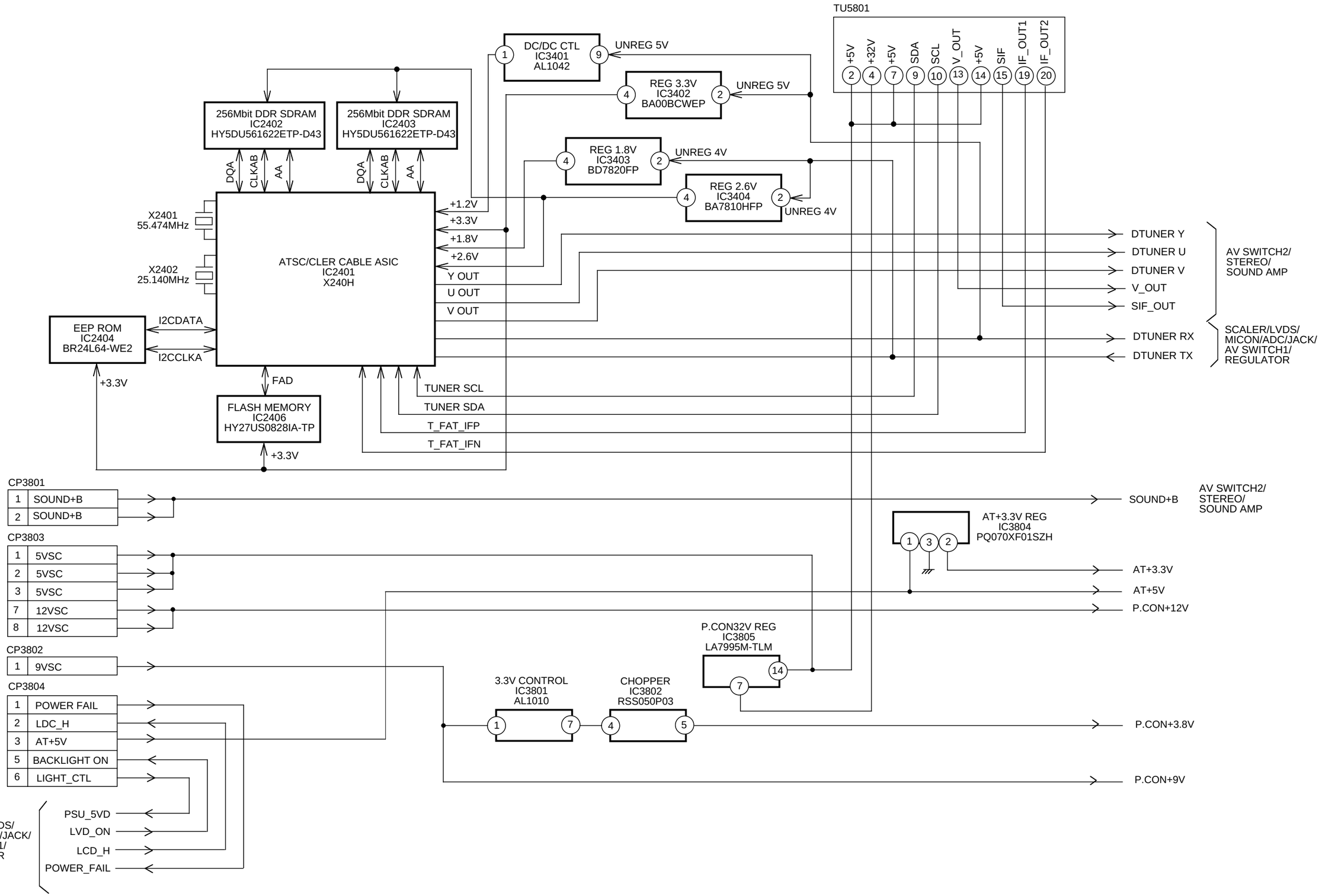
SCALER/LVDS/MICON/ADC/JACK/AV SWITCH1/REGULATOR BLOCK DIAGRAM



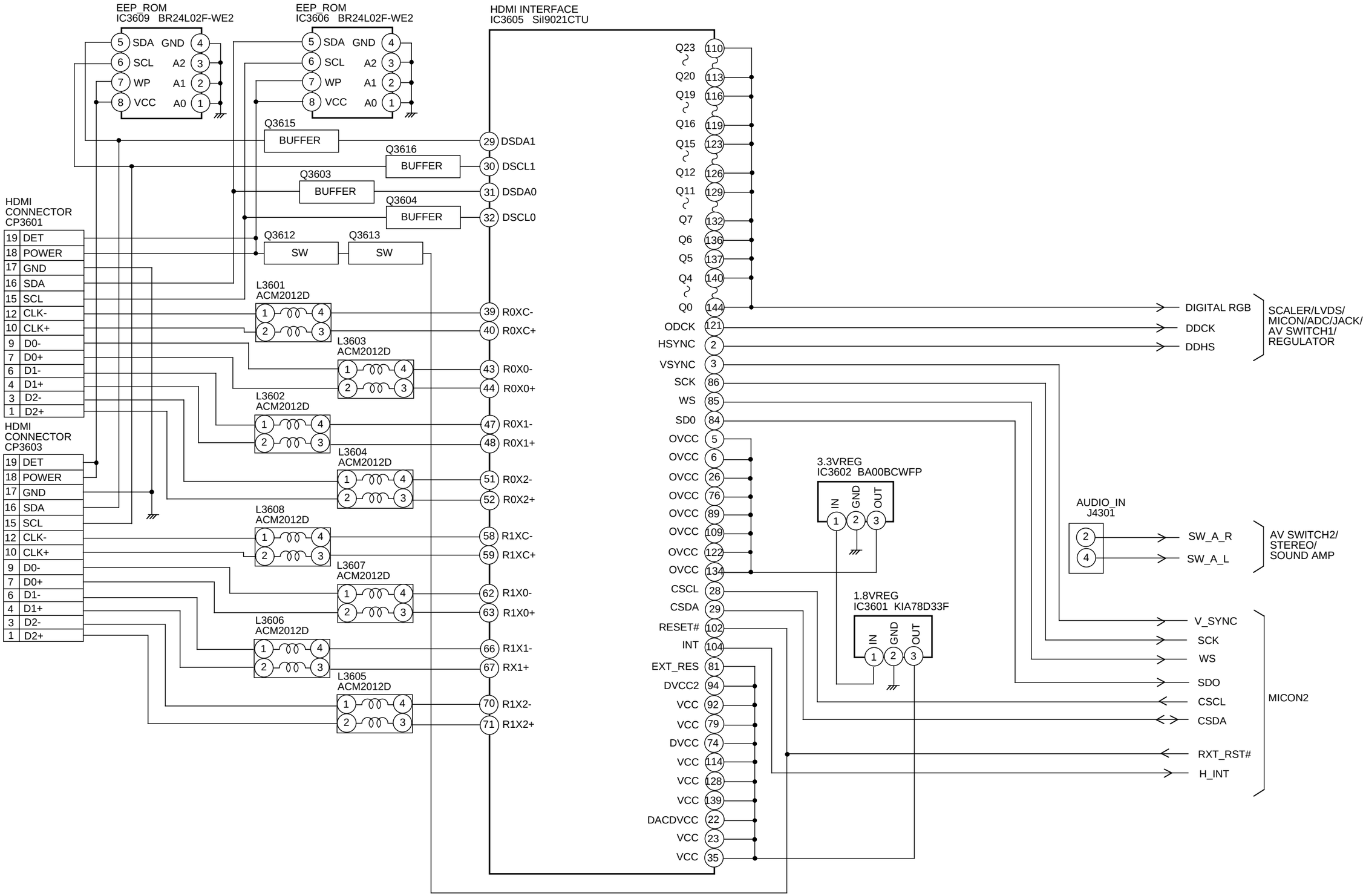
AV SWITCH2/STEREO/SOUND AMP BLOCK DIAGRAM



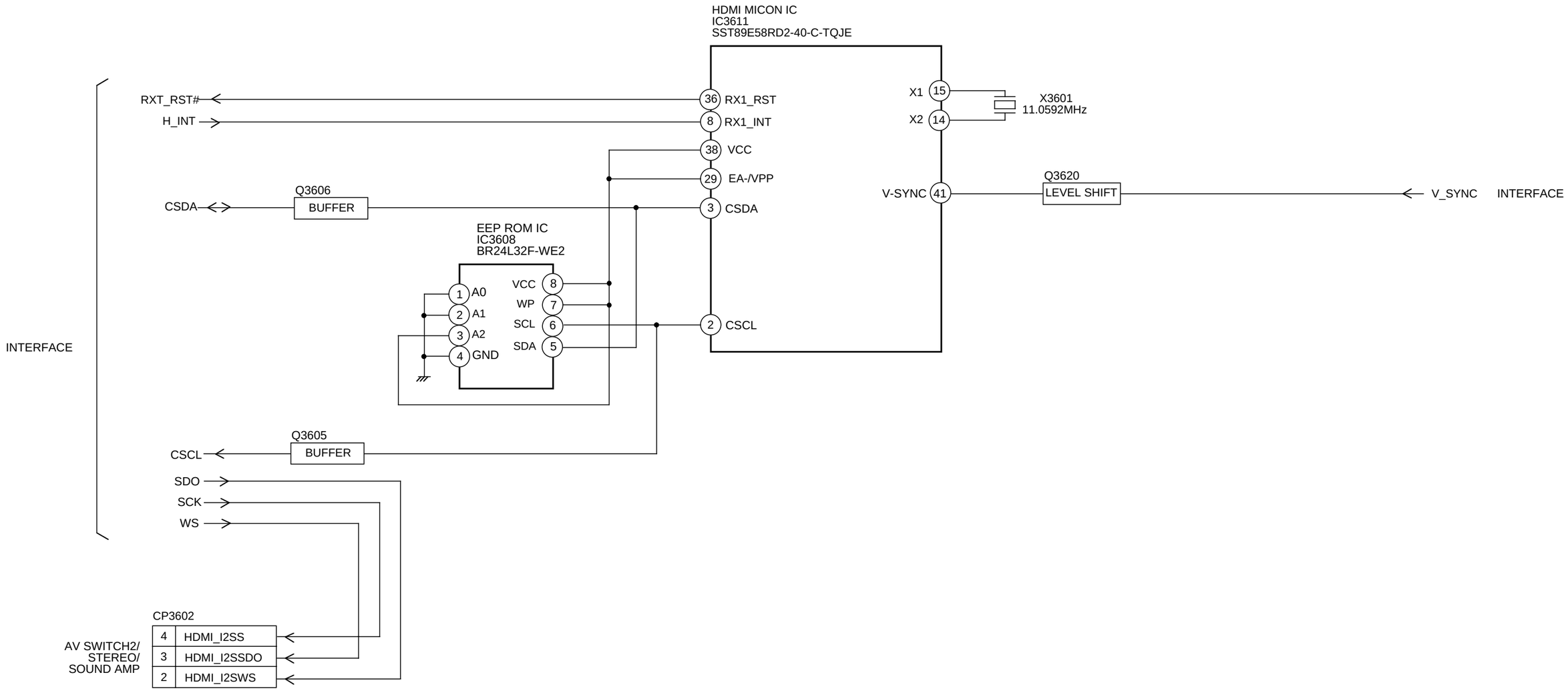
TUNER/DIGITAL/POWER BLOCK DIAGRAM



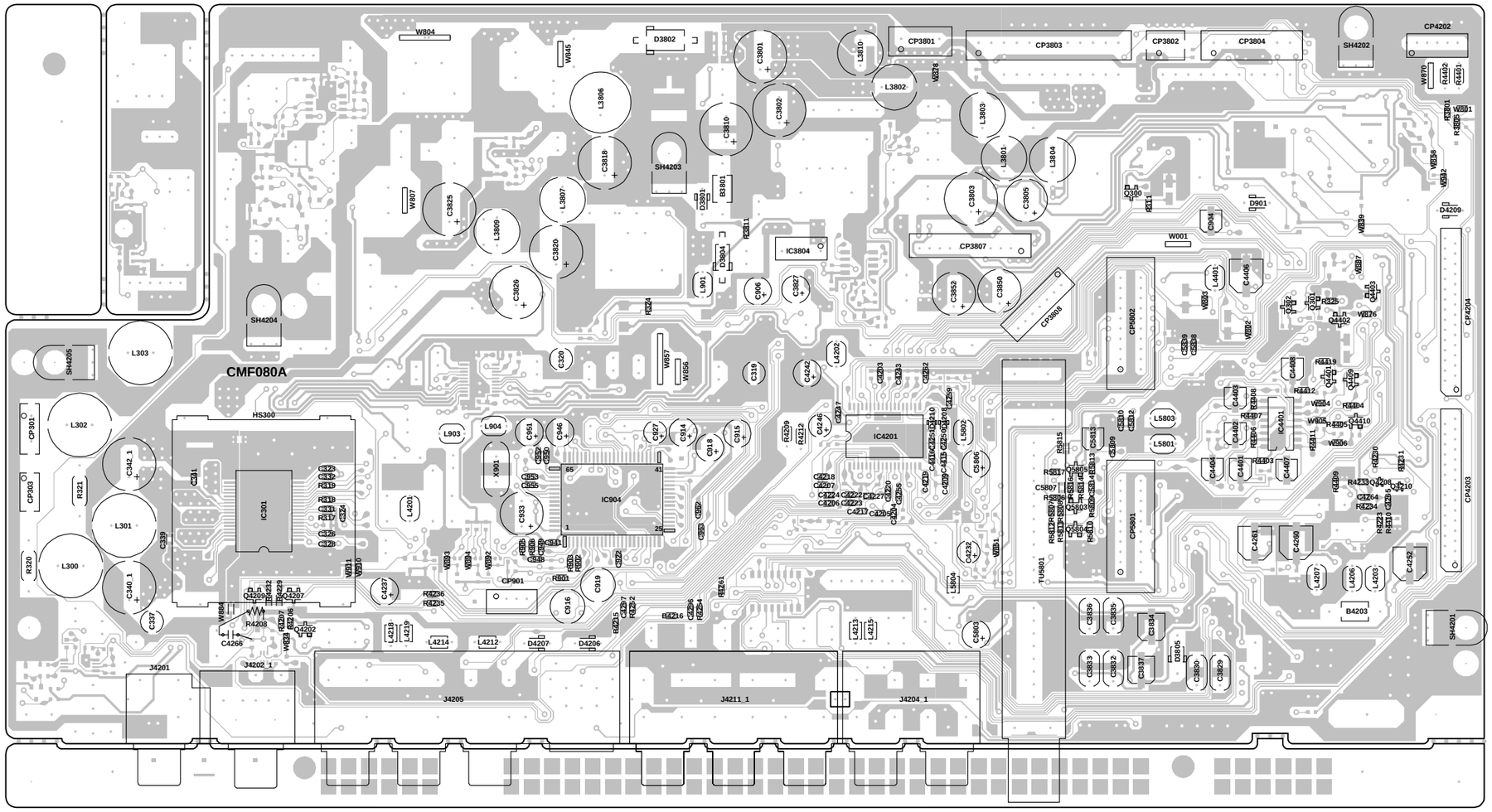
INTERFACE BLOCK DIAGRAM



MICON2 BLOCK DIAGRAM



PRINTED CIRCUIT BOARDS
AV (TOP SIDE)


CMF080A
W804
W845
D3802
C3801
L3810
CP3801
CP3803
CP3802
CP3804
SH4202
CP4202
W878
R4402
R4401
L3802
L3803
L3806
C3810
C3802
W801
W807
C3825
L3807
L3809
C3818
SH4203
D3801
R3811
L3801
L3804
C3803
C3805
D901
D4209
W001
IC3804
D3804
CP3807
L901
C906
C907
C3852
C3850
CP3808
CP3802
L401
C4406
SH4204
L303
SH4205
CP901
L302
HS300
L903
L904
C951
C946
C927
C914
C915
C918
R4209
R4212
C4246
IC4201
L5802
L5803
L5801
C5806
C5807
C5813
C5810
C5812
C5809
C4403
C4405
C4407
C4401
IC4401
R4403
R4407
R4411
R4412
W504
W505
W506
R4419
R4404
R4410
C4402
C4466
C4465
C4464
R4233
Q4206
Q4210
C4261
C4260
C4252
L4207
L4206
L4203
B4203
SH4201
CP4203
CP4204
C342_1
C341
IC301
C329
C332
R319
R318
C331
R317
C324
C326
C328
C339
R321
L301
L300
R320
C340_1
C337
L4201
C933
C941
C940
C939
C938
C922
C919
C916
C4237
R4236
R4235
R801
CP902
W884
R4208
C4266
D4208
D4207
R4229
R4232
Q4207
R4207
R4206
C4202
W834
L4218
L4219
L4214
L4212
D4206
D4205
R4215
C4229
R4224
C4216
R4261
C4236
R4234
L4213
L4215
C5803
C3836
C3835
C3834
C3833
C3832
C3837
D3805
C3850
C3829
J4201
J4202_1
J4205
J4211_1
J4204_1
W556
W557
C320
C319
C4242
L4202
C4233
C4232
C4234
C4259
C4210
C4209
C4208
C4218
C4207
C4224
C4222
C4227
C4206
C4223
C4217
C4220
C4205
C4235
C4215
C4213
C4214
C4212
C4211
C4204
C4203
C4201
C4202
C4208
C4207
C4205
C4206
C4216
C4236
C4237
C4238
C4239
C4240
C4241
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C4244
C4245
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C4264
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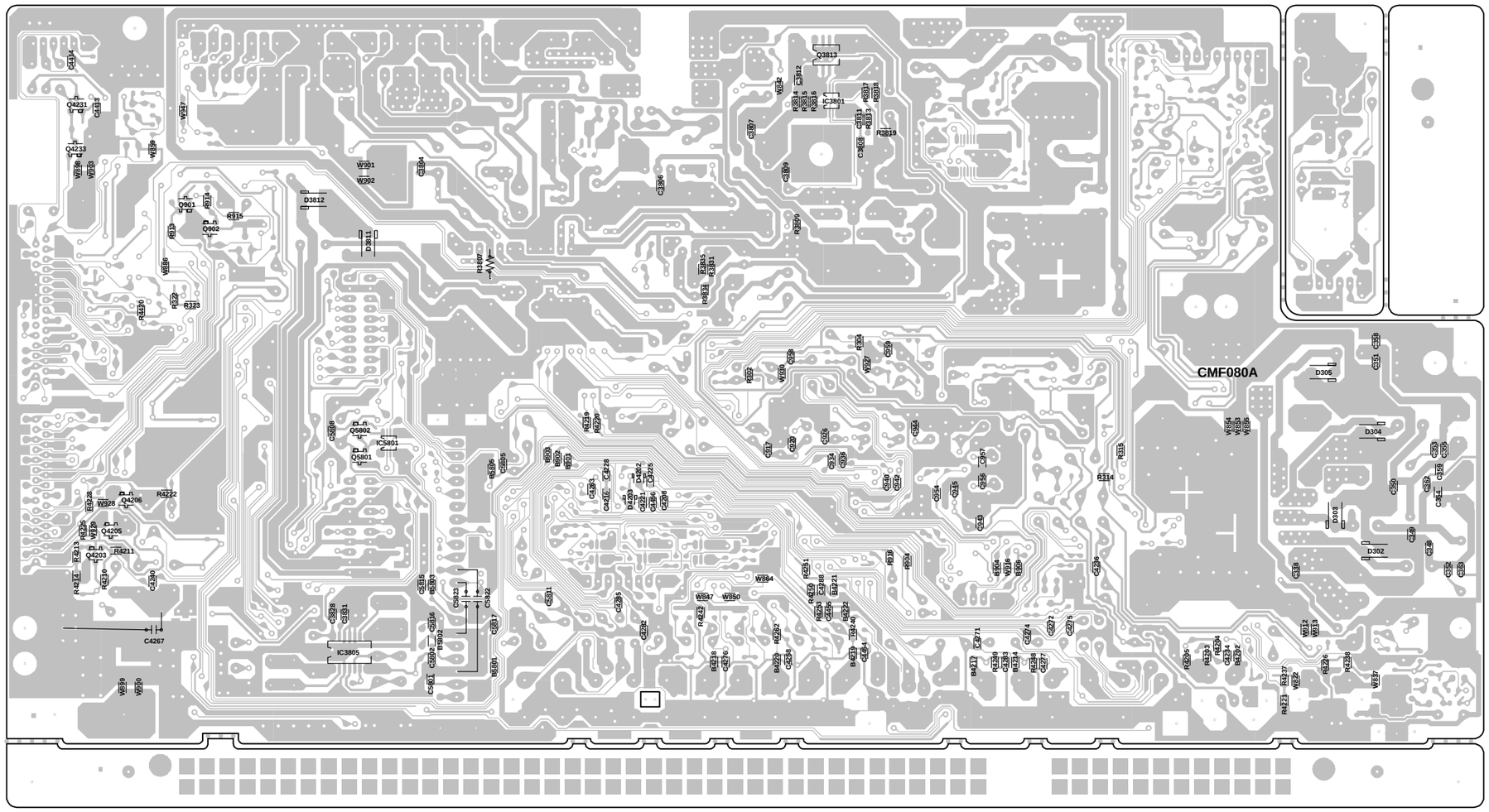
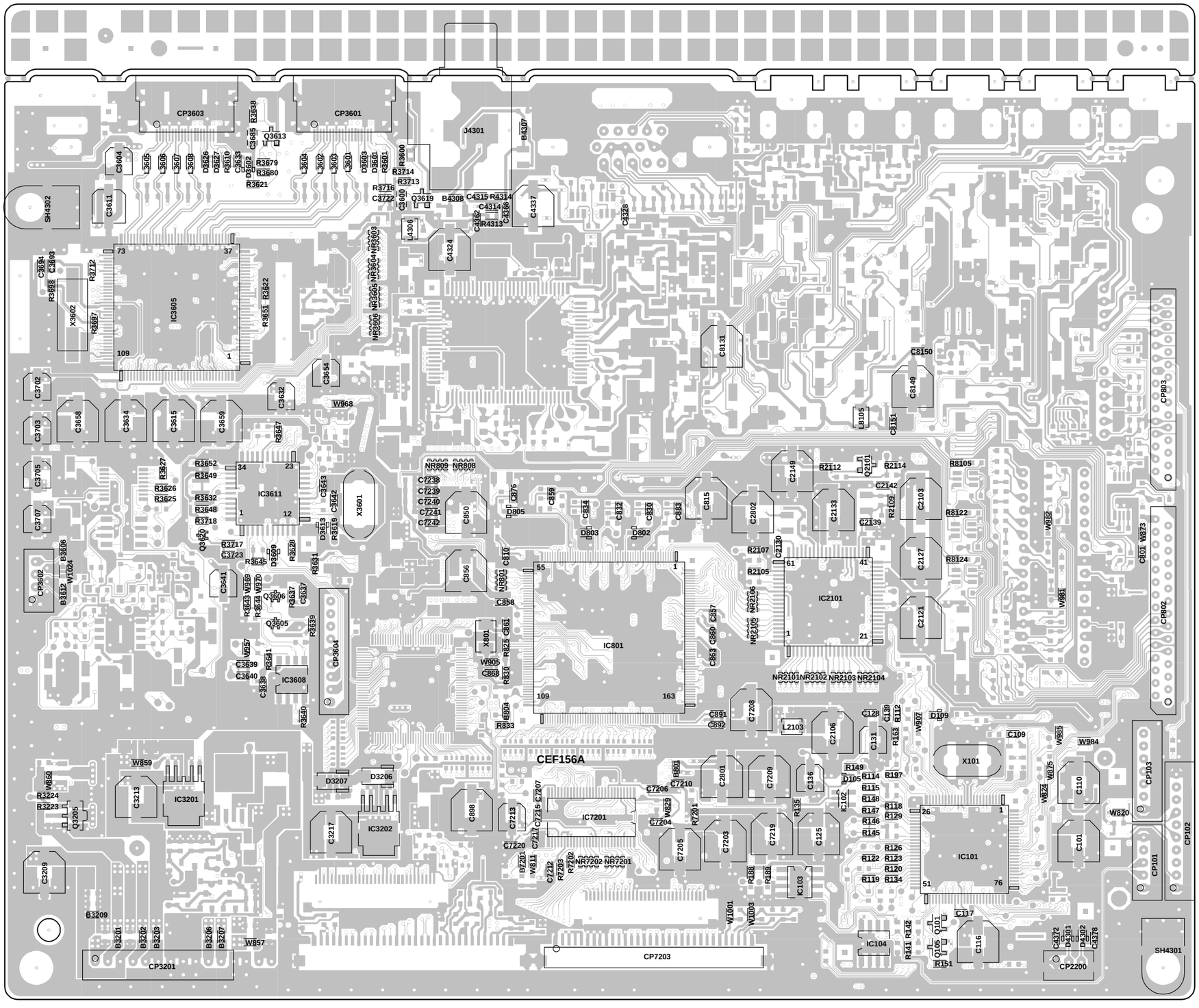
C4266
C4267
C4268
C4269
C4270
C4271
C4272
C4273
C4274
C4275
C4276
C4277
C4278
C4279
C4280
C4281
C4282

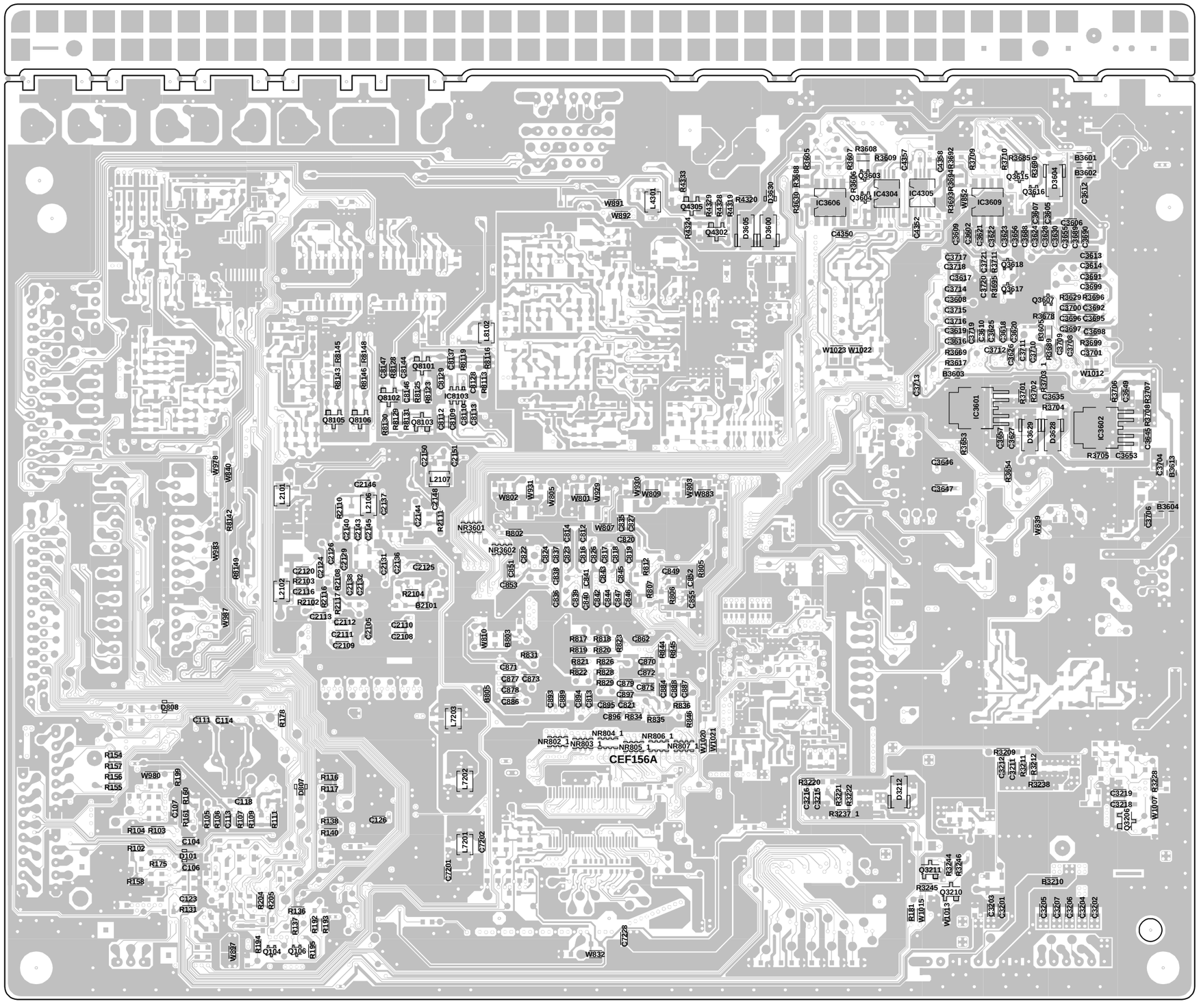
PRINTED CIRCUIT BOARDS
AV (BOTTOM SIDE)



PRINTED CIRCUIT BOARDS
SCALER (TOP SIDE)

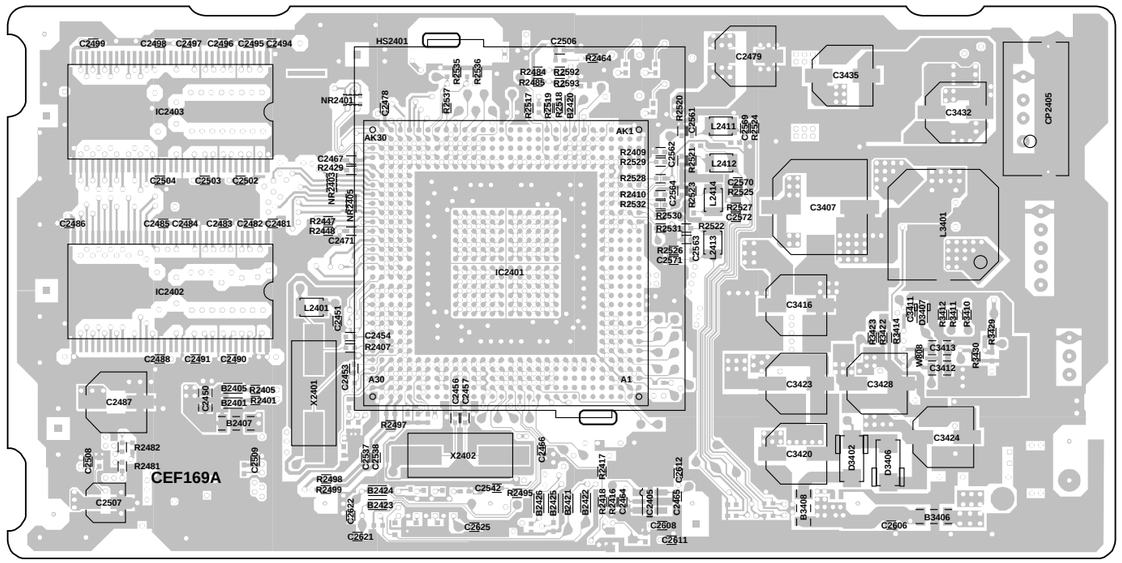


PRINTED CIRCUIT BOARDS
SCALER (BOTTOM SIDE)

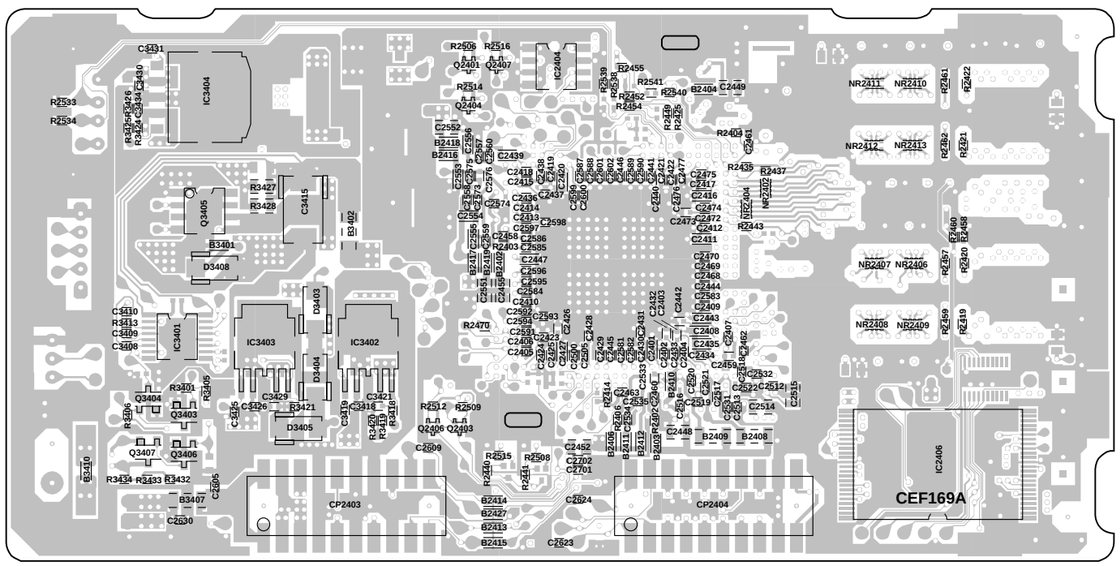


PRINTED CIRCUIT BOARDS

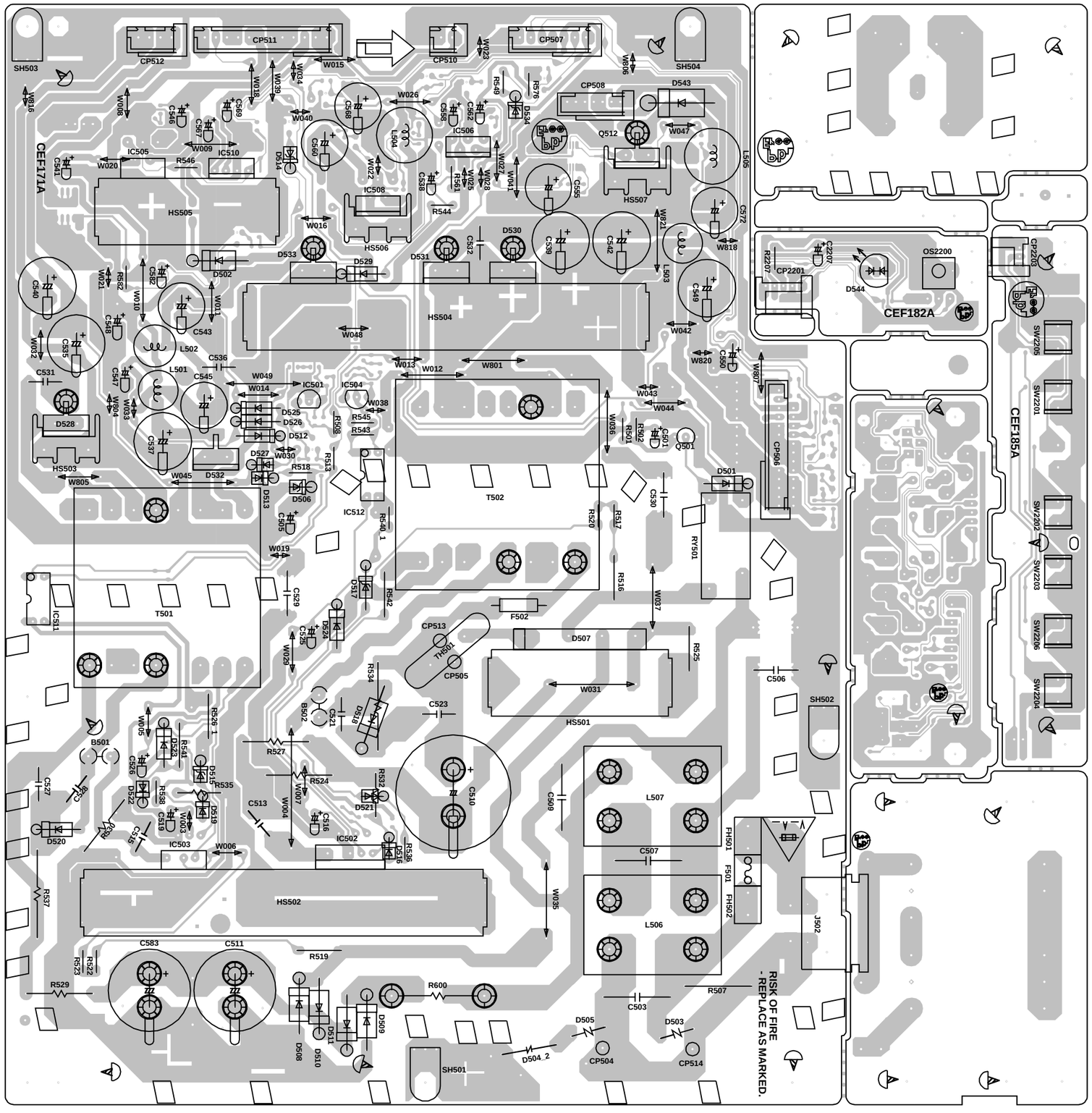
DIGITAL (TOP SIDE)



DIGITAL (BOTTOM SIDE)



PRINTED CIRCUIT BOARDS
POWER/REMOCON/OPERATION (INSERTED PARTS)
SOLDER SIDE


CEF171A
CEF182A
CEF185A
SH503
SH504
SH502
SH501
CP512
CP511
CP510
CP507
CP508
CP513
CP505
CP504
CP514
CP2201
CP2203
CP506
HS505
HS506
HS504
HS507
HS503
HS502
HS501
IC505
IC510
IC508
IC506
IC501
IC504
IC503
IC502
IC512
IC511
T502
T501
F502
Q512
Q501
D543
D544
D502
D533
D529
D531
D530
D528
D525
D526
D512
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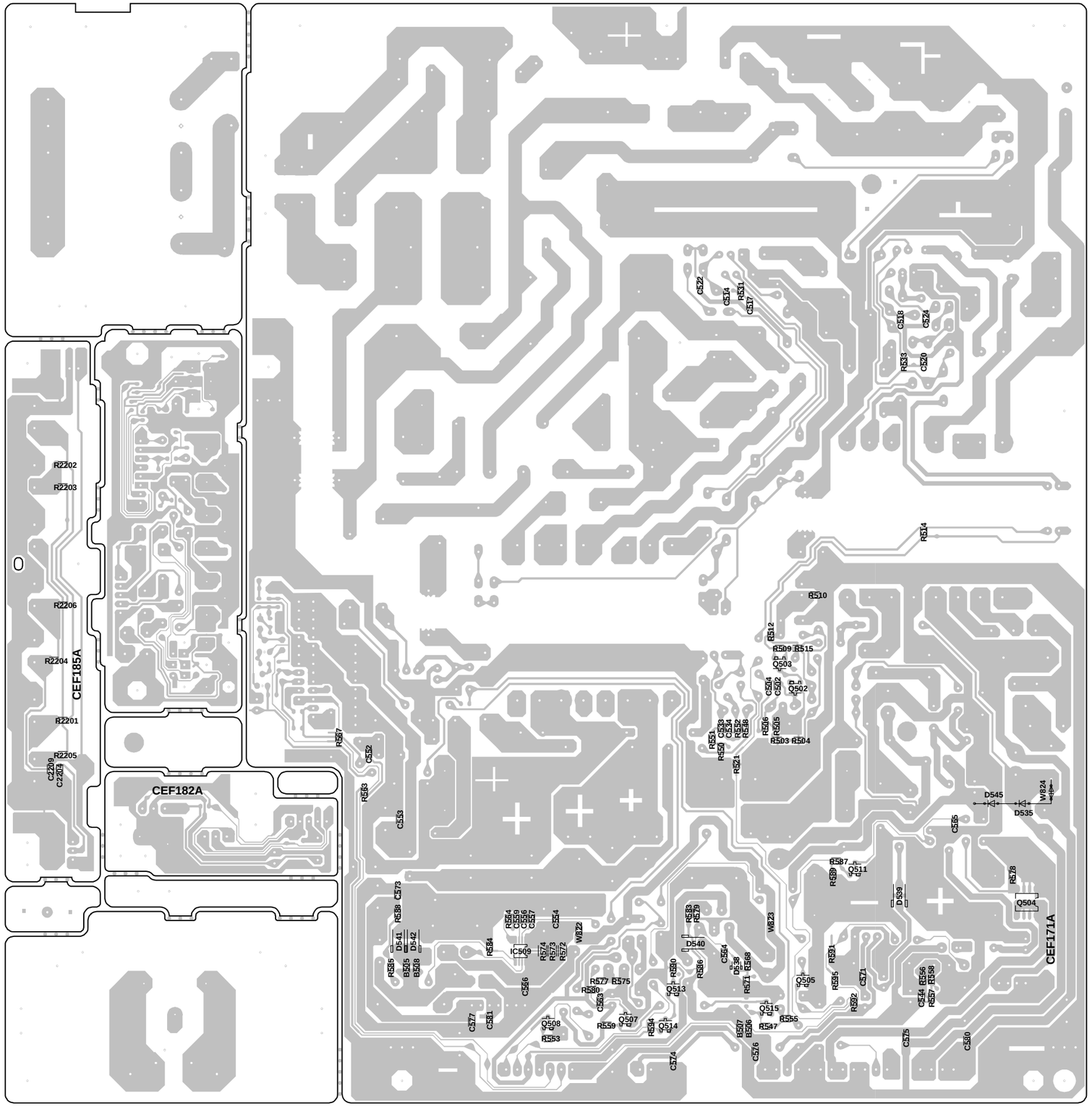
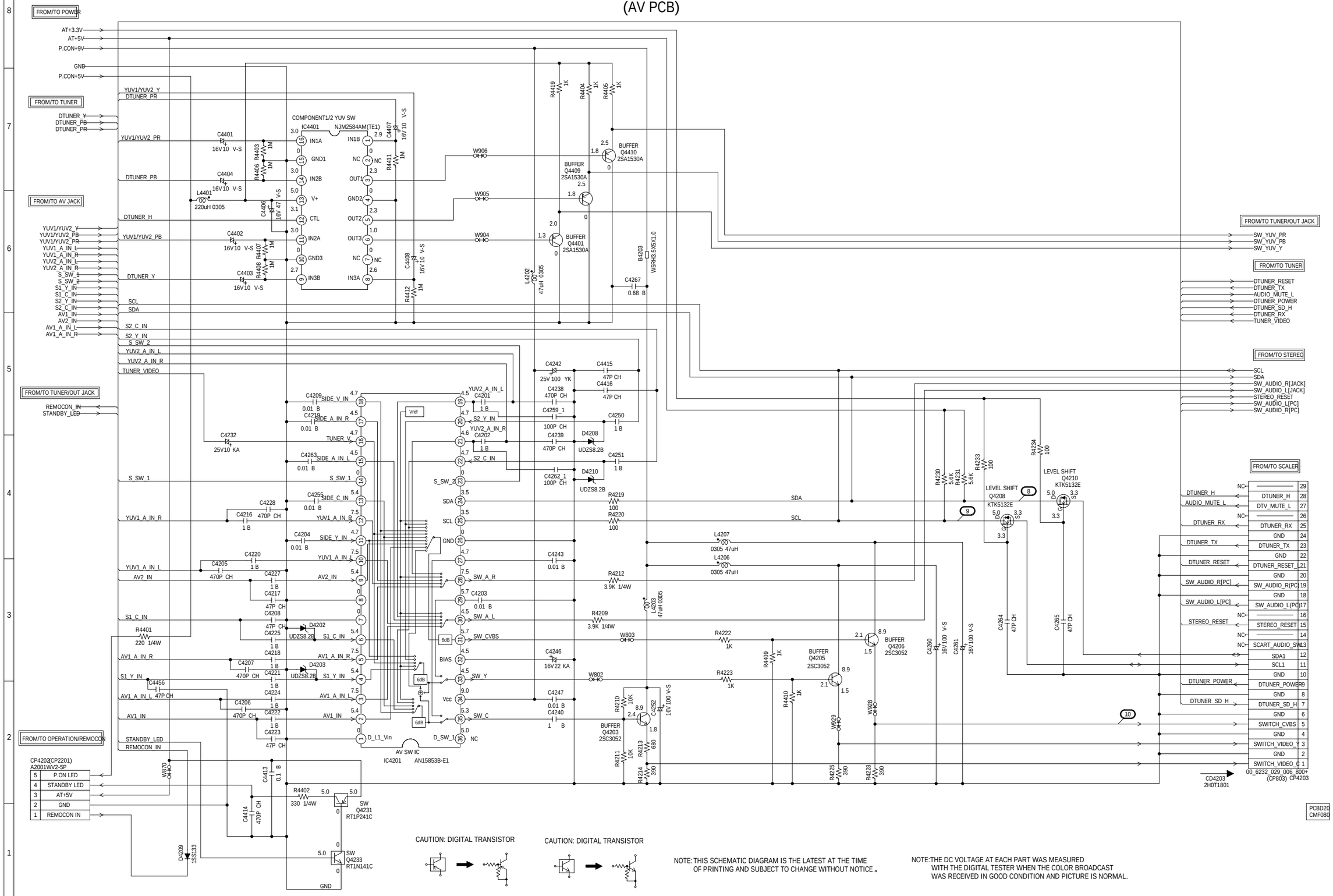
D532
D513
D506
D524
D514
D517
D523
D522
D519
D520
D521
D516
D507
D501
D503
D505
D509
D508
D510
D511
TH501
OS2200
L504
L505
L502
L501
L503
L507
L506
RY501
FH501
FH502
F501
J502
SW2205
SW2201
SW2203
SW2206
SW2204
B501
B502
W816
W008
W018
W039
W034
W015
W023
W806
W026
W040
W009
W020
W022
W025
W028
W027
W041
W047
W016
W048
W013
W012
W801
W049
W014
W038
W030
W045
W805
W019
W029
W031
W035
W037
W021
W010
W011
W032
W033
W804
W036
W043
W044
W042
W820
W807
W818
W821
W005
W007
W004
W003
W006
W017
W001
W002
W802
W803
W808
W809
W810
W811
W812
W813
W814
W815
W817
W819
W822
W823
W824
W825
W826
W827
W828
W829
W830
W831
W832
W833
W834
W835
W836
W837
W838
W839
W840
W841
W842
W843
W844
W845
W846
W847
W848
W849
W850
W851
W852
W853
W854
W855
W856
W857
W858
W859
W860
W861

PRINTED CIRCUIT BOARDS
POWER/OPERATION (CHIP MOUNTED PARTS)
SOLDER SIDE



AV SWITCH2 SCHEMATIC DIAGRAM

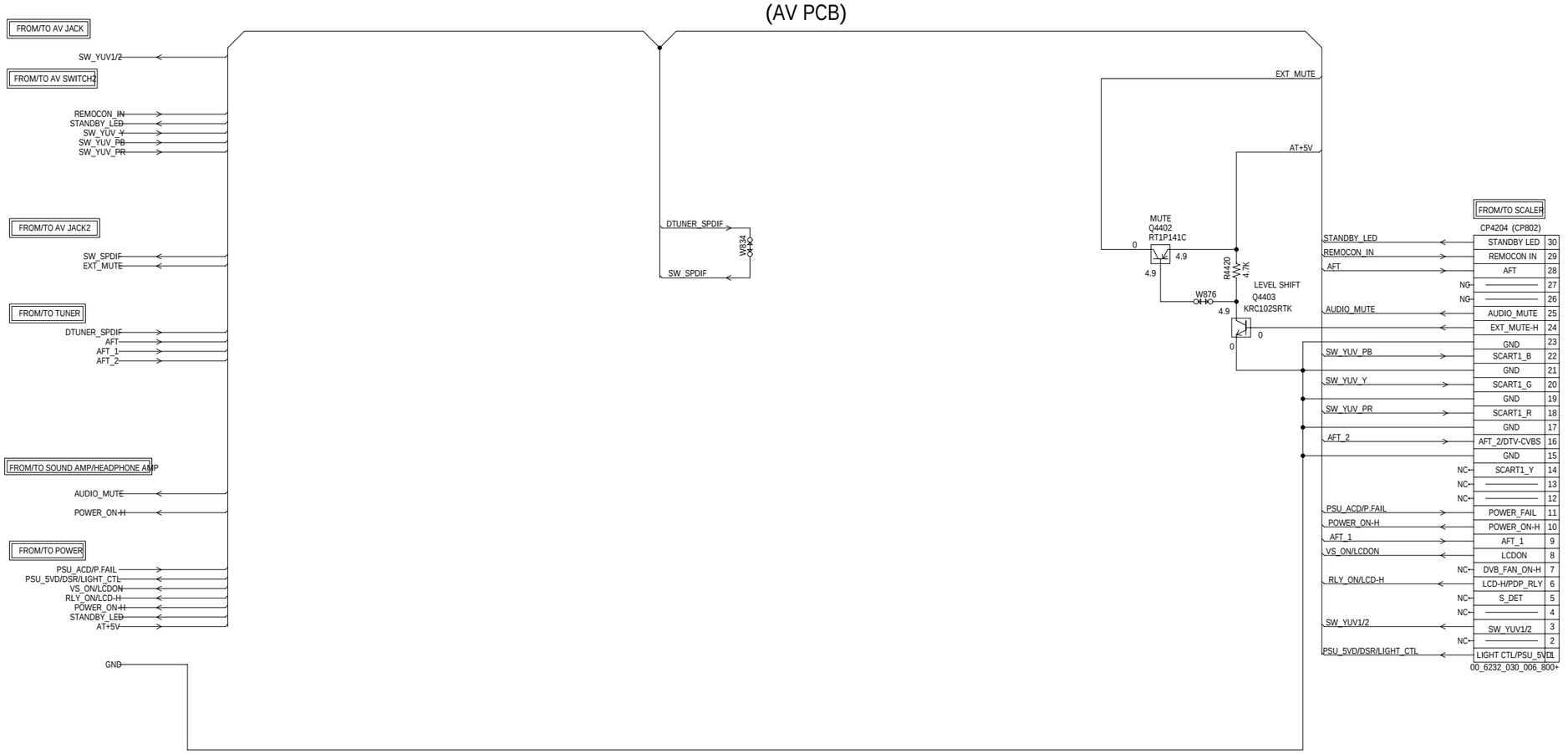
(AV PCB)



H-1 H-2

TUNER/OUT JACK SCHEMATIC DIAGRAM

(AV PCB)

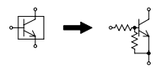


PCBD20
CMF080

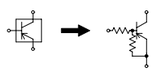
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION: DIGITAL TRANSISTOR

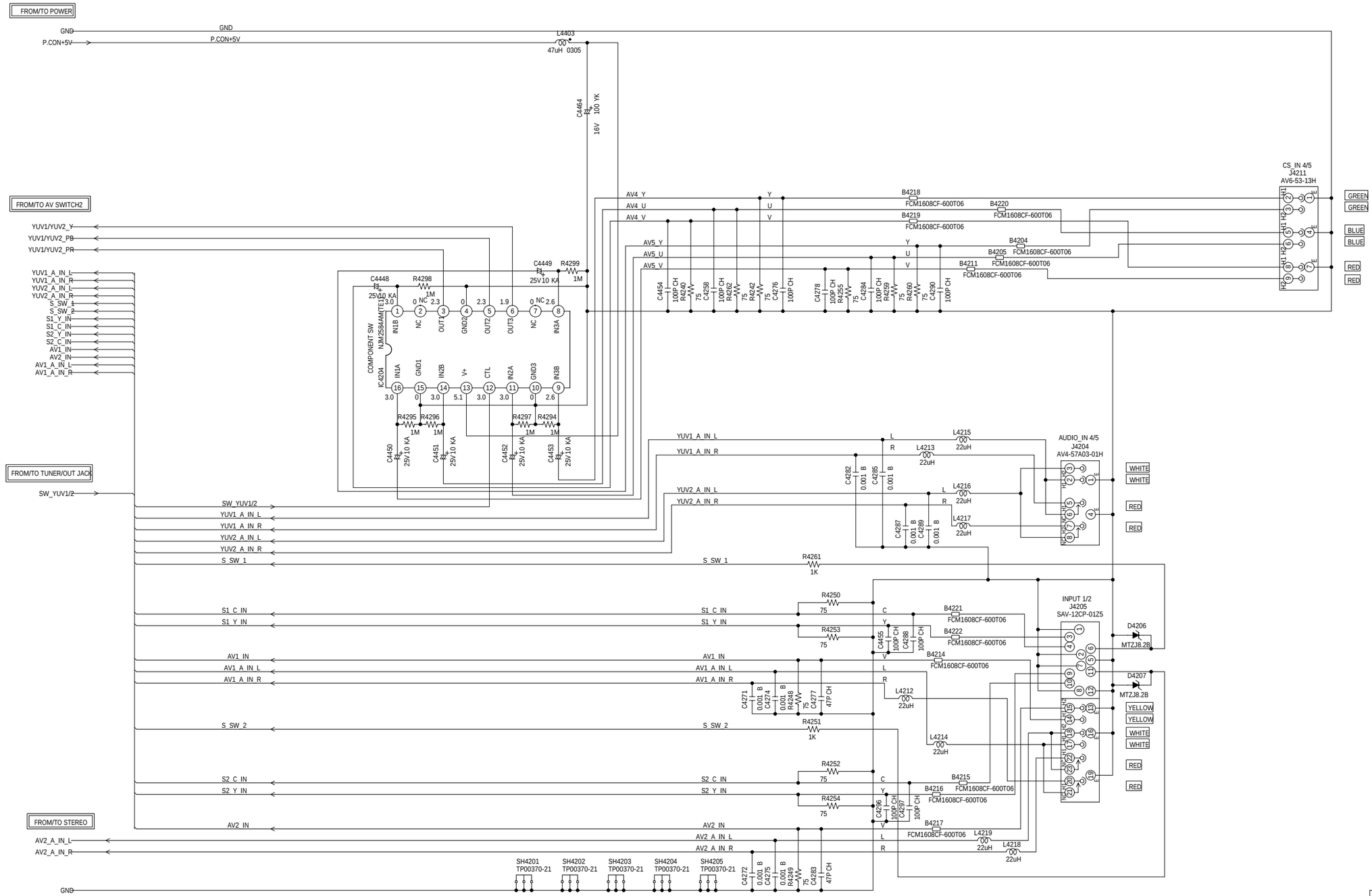


CAUTION: DIGITAL TRANSISTOR



AV JACK SCHEMATIC DIAGRAM

(AV PCB)



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STEREO SCHEMATIC DIAGRAM

(AV PCB)

FROM/TO POWER

AT+5V

P.CON+5V

GND

P.CON+8V

W839

R914 10K

R915 10K

C906 10V220 YK

R913 1K

BUFFER Q901 2SC3052

BUFFER Q902 2SC3052

L901 10uH 0305

B901 BLM18PG121SN1D

B902 FCM1608CF-600T06

B903 BLM18PG121SN1D

FROM/TO TUNER

I2SSD0_OUTA

I2SWS_OUTA

I2SSCLK_OUTA

I2SSD0_IN

I2SWS_IN

I2SSCLK_IN

R906 100

R905 100

L903 10uH 0305

C933 6.3V 1000 YK

C941 0.0015 B

C943 470P CH

C945 220P CH

C948 22P CH

C949 22P CH

C922 0.1 B

D901 MTZJ5.6B

C904 16V 22V-S

R901 33

R902 33

R903 33

FROM/TO HDMI MICON2

CP901(CP3602) A2001WV2-4P

HDMI_I2SSCK/MCKL	4
HDMI_I2SSDO	3
HDMI_I2SWS	2
GND	1

B904 FCM1608KF-102T02

B906 FCM1608KF-102T02

W892 W893 W894 W916

CD901 CU248101

TR303 W5T29X7.5X19

TR305 W5T29X7.5X19

FROM/TO SOUND AMP/HEADPHONE AMP

W927

SP_AUDIO_OUT_L

SP_AUDIO_OUT_R

C959 0.0022 B

W857

W856

W930

C958 0.0022 B

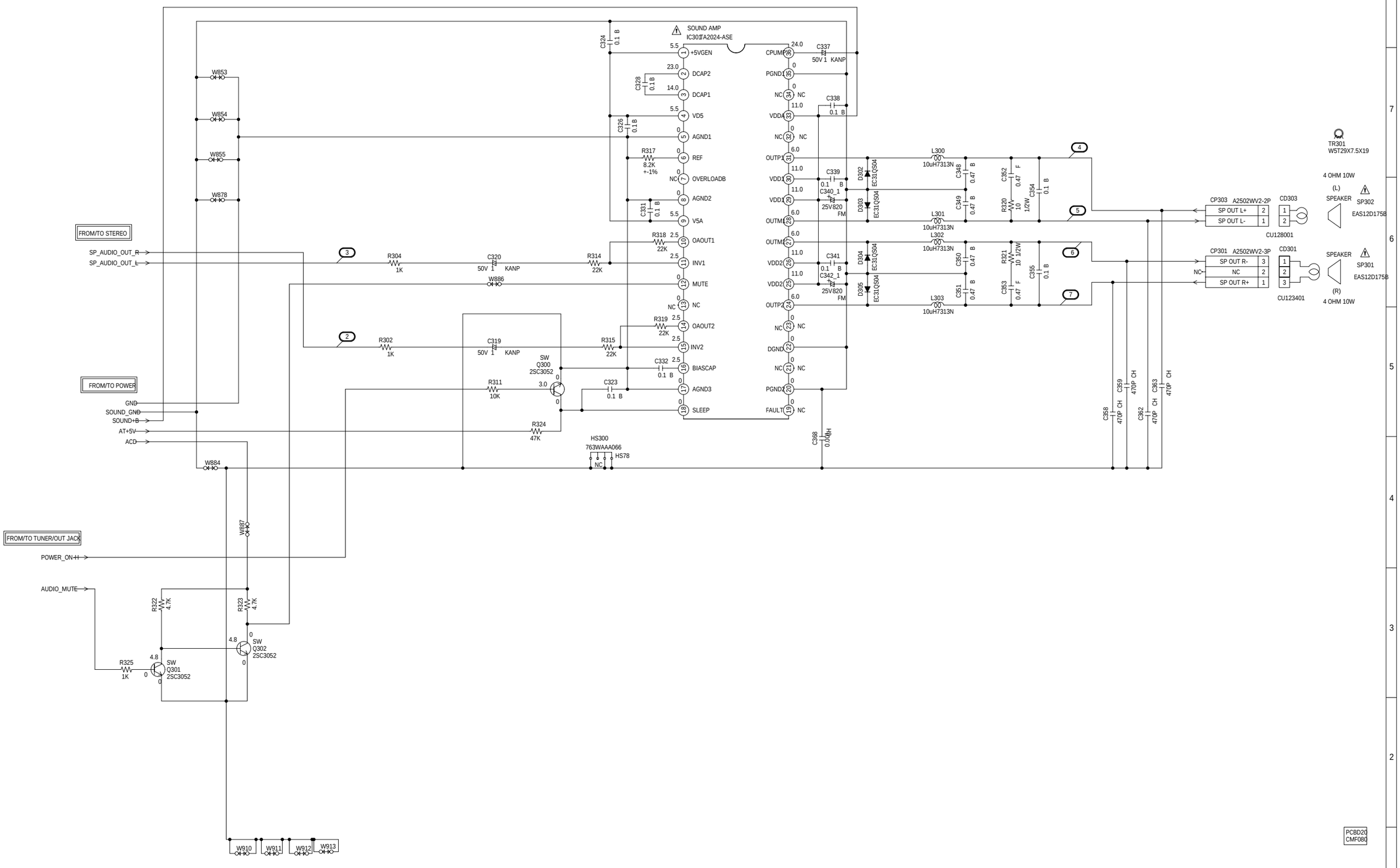
L904 10uH 0305

STEREO IC904 MSP4440G-QA-C13-100

| | | |

SOUND AMP/HEADPHONE AMP SCHEMATIC DIAGRAM

(AV PCB)



CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY 。

ATTENTION LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

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POWER SCHEMATIC DIAGRAM

(AV PCB)

FROM/TO POWER3
CP3802 (CP510)
A2501WV2-2P
1 9VSC
2 GND
CD3802 CU124001
L3801 22uH TSL0808
C3803 16V 1000 FM
L3810 10uH TSL0808
FROM/TO TUNER/OUT JACK
STANDBY_LED
CP3803(CP511)
A2501WV2-12P
1 5VSC
2 5VSC
3 5VSC
4 GND
5 GND
6 GND
7 12VSC
8 12VSC
9 GND
10 GND
11 ST_BY_H
12 NC
L3802 22uH TSL0808
C3801 16V 1000 FM
L3803 22uH TSL0808
C3802 16V 1000 FM
W947
FROM/TO SOUND AMP/HEADPHONE AMP
ACD
FROM/TO POWER3
CP3804(CP507)
A2501WV2-7P
1 POWER_FAIL
2 LCD-H
3 AT+5V
4 GND
5 BACKLIGHT ON
6 LIGHT_CTL
7 POWER_ON_H
R3801 2.2K
W859
L3804 22uH TSL0808
W858
W801
W942
C3804 0.001 B
R3805 4.7K
C3805 6.3V 1000 1K
B3801 W5RH3.5X5X1.0
C3806 100P CH
C3810 16V1000 FM
C3807 0.1 B
R3814 0.047 1/10W+-1%
R3816 0.047 1/10W+-1%
R3815 0.047 1/10W+-1%
C3808 0.047 B
C3809 0.1 B
R3809 22K
D3801 1SS133
R3811 VR 58K
R3813 VR 33K
C3811 27PCH
C3812 0.01 B
3.3V CONTROL
IC3801 AL1010
VIN CS
V5/PWON EXT
Vref/SS GND
CC FB
SWITCHING
Q3813 RSS050P03
R3818 1.8K +1%
R3819 680 +-1%
R3817 VR 1K +-1%
D3802 21DQ04N
L3806 15uH SBPSC
L3807 10uH TSL0808
C3818 16V 680 FM
C3820 6.3V 1000 FM
REGULATOR
IC3804 PQ070XF01SZH
IN OUT GND
W842
C3827 10V 100 YK
R3834 R3831 15K
R3835 22K
FROM/TO POWER3
CP3808(CP508)
A2001WV2-7P
DTV UNREG+5V 1
DTV UNREG+5V 2
DTV UNREG+4V 3
DTV UNREG+4V 4
GND 5
GND 6
GND 7
D3811 EC31QS04
D3812 EC31QS04
C3850 6.3V 470 MHE
FROM/TO TUNER
UNREG+5V
UNREG+4V
P.CON+32V
C3852 6.3V 470 MHE
FROM/TO AV JACK2
P.CON+5V
GND
C3835 0.22 MMTS
C3836 0.22 MMTS
C3831 150P CH
D3805 1H5-E
P.CON32V REG
IC3805 LA7995M-TLM
CVCC COSC NC NC NC CP3 CP3
CP1 CP1 GND CP2 CP2 CREG COUT
C3829 0.22 MMTS
C3830 0.22 MMTS
C3832 0.22 MMTS
C3833 0.22 MMTS
C3828 0.01 B
C3834 50V 4.7V-S
C3837 50V 4.7V-S
FROM/TO TUNER/OUT JACK
AT+5V
GND
FROM/TO STEREO
D3804 1H3-E
P.CON+8V
P.CON+5V
AT+5V
GND
FROM/TO AV JACK
P.CON+5V
GND
FROM/TO AV SWITCH2
AT+5V
AT+3.3V
P.CON+9V
P.CON+5V
GND
FROM/TO TUNER/OUT JACK
PSU_ACD/P.FAIL
PSU_5VD/DSR/LIGHT_CTL
VS_ON/LCDON
RLY_ON/LCD-H
POWER_ON-H
L3809 6.8uH RCH8011NP-6R8L
W804
W807
C3825 25V 820 FM
C3826 25V 820 FM
FROM/TO RREGULATOR
CP3807 (CP3201)
A2001WV2-11P
P.CON+12V 1
P.CON+9V 2
P.CON+5V 3
AT+3.3V 4
P.CON+3.8V 5
P.CON+3.8V 6
GND 7
GND 8
GND 9
P.CON+5V 10
AT+5V 11
R3807 VR 3.9K
TR304 W5T29X7.5X19
CD3807 CU2B6601
FROM/TO POWER3
CP3801 (CP512)
A2501WV2-4P
1 SOUND+B
2 SOUND+B
3 SOUND GND
4 SOUND GND
W845
FROM/TO SOUND AMP/HEADPHONE AMP
AT+5V
GND
SOUND+B
SOUND_GND
PCBD20
CMF080

CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY 。

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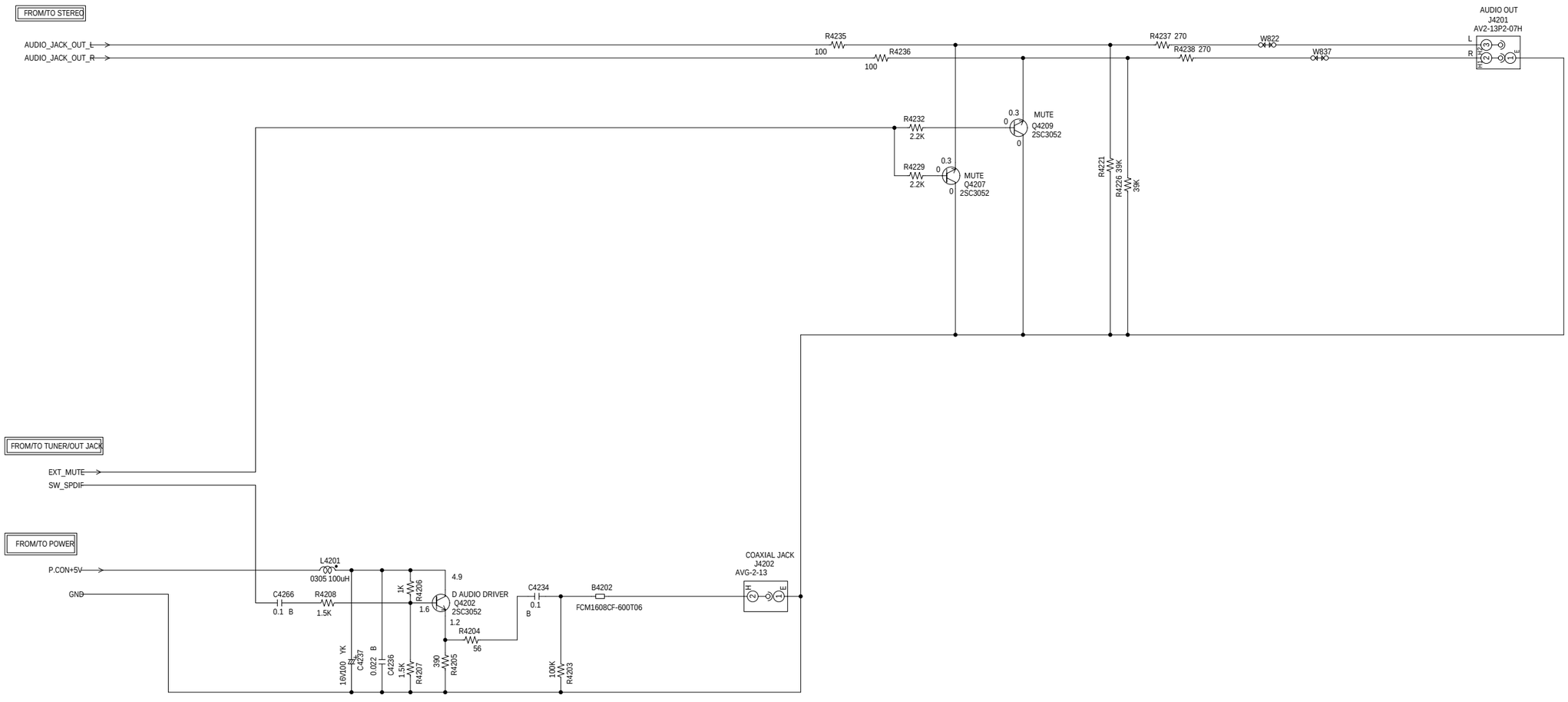
AV JACK2 SCHEMATIC DIAGRAM

(AV PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

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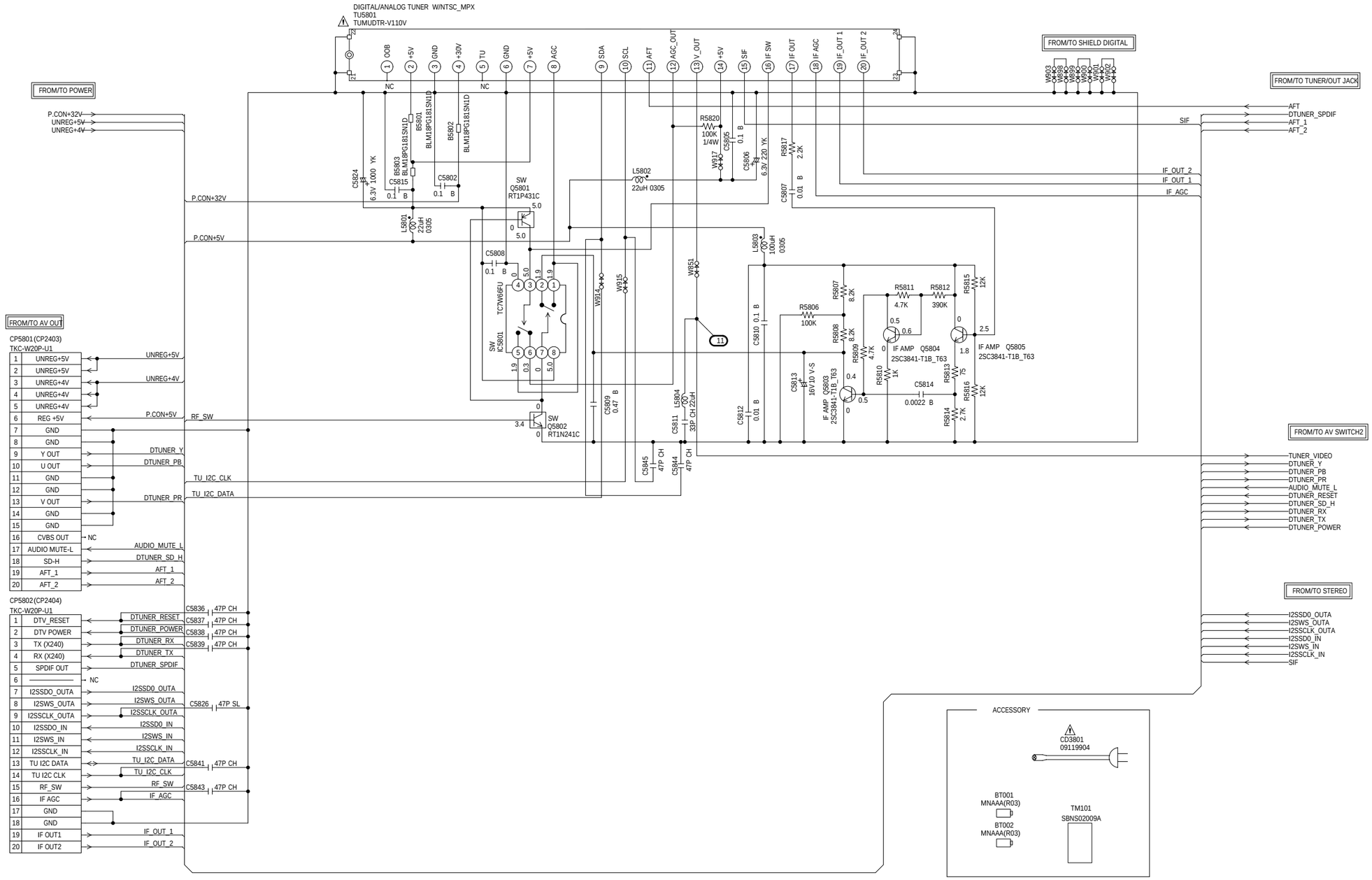
TUNER SCHEMATIC DIAGRAM

(AV PCB)



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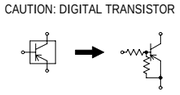
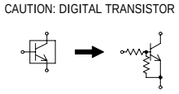
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION: DIGITAL TRANSISTOR



CAUTION: DIGITAL TRANSISTOR



MICON SCHEMATIC DIAGRAM

(SCALER PCB)

MICON
IC101
OEC7154A

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CAUTION: DIGITAL TRANSISTOR

CAUTION: DIGITAL TRANSISTOR

SCALER SCHEMATIC DIAGRAM

(SCALER PCB)

FROM/TO TUNER/OUT JACK

CP802(CP4204)
00_6232_030_006_800+

1	STANDBY LED
2	REMOCON IN
3	AFT
4	NC
5	NC
6	AUDIO_MUTE
7	EXT_MUTE-H
8	GND
9	SCART1_B
10	GND
11	SCART1_G
12	GND
13	SCART1_R
14	GND
15	AFT_2/DTV_CVBS
16	GND
17	SCART1_Y
18	NC
19	NC
20	POWER_FAIL
21	POWER_ON-H
22	AFT_1
23	LCDON
24	DVB_FAN_ON-H
25	LCD-H/PDP_RLY
26	S_DET
27	NC
28	SW_YUV1/2
29	NC
30	LIGHT CTL/PSU_5VD

FROM/TO AV SWITCH2

CP803(CP4203)
00_6232_029_006_800+

1	NC
2	DTUNER_H
3	DTV_MUTE_L
4	NC
5	DTUNER_RX
6	GND
7	DTUNER_TX
8	GND
9	DTUNER_RESET_L
10	GND
11	SW_AUDIO_R(PC)
12	GND
13	SW_AUDIO_L(PC)
14	NC
15	STEREO_RESET
16	NC
17	SCART_AUDIO_SW
18	SDA1
19	SCL1
20	GND
21	DTUNER_POWER
22	GND
23	DTUNER_SD_H
24	GND
25	SWITCH_CVBS
26	GND
27	SWITCH_VIDEO_Y
28	GND
29	SWITCH_VIDEO_C

FROM/TO AV SWITCH1

SW_G/SW_Y
SW_R/SW_CR
SW_B/SW_CB
SW2_R/CR
SW2_G/Y
SW2_B/CB
SW_CVBS
SW_VIDEO_Y

SCALER
IC801
R8J66607A72FP

FROM/TO MICON

STANDBY_LED
REMOCON_IN
AFT
SCART1_Y
EXT_MUTE-H
POWER_FAIL
POWER_ON-H
LCD-H
LCDON
LIGHT_CTL
STEREO_RESET
AUDIO_MUTE
SDA1
SCL1
SCALER_RESET
4SI_CHIP_SE
4SI_SDA_OUT
4SI_SDA_IN
4SI_SCL
S_DET
SW_SCART
SCART_AUDIO_SW
AFT_1[LOW]
DVB_FAN_ON-H
3DY/C_RESET
AFT_2[HIGH]
DVB_MUTE-L
DVB_RX
DVB_TX
DVB_RESET-L
DVB_POWER_CTL-H
SD_H
DIGI/ANA_CVBS
DVS

FROM/TO LVDS

DR9_W/O_DV
DR8_W/O_DV
DR7_W/O_DV
DV6_W/O_DV
DR5_W/O_DV
DR4_W/O_DV
DR3_W/O_DV
DR2_W/O_DV
DB9_W/O_DV
DB8_W/O_DV
DB7_W/O_DV
DB6_W/O_DV
DB5_W/O_DV
DB4_W/O_DV
DB3_W/O_DV
DB2_W/O_DV
DG9_W/O_DV
DG8_W/O_DV
DG7_W/O_DV
DG6_W/O_DV
DG5_W/O_DV
DG4_W/O_DV
DG3_W/O_DV
DG2_W/O_DV
DCLK1
DHS
DEN
DVS

FROM/TO ADC1

DDHS
DDVS
DDCK
DPG7
DPG6
DPG5
DPG4
DPG3
DPG2
DPG1
DPG0
DPR7
DPR6
DPR5
DPR4
DPR3
DPR2
DPR1
DPR0
DPB7
DPB6
DPB5
DPB4
DPB3
DPB2
DPB1
DPB0

FROM/TO REGULATOR

P.CON+1.5V
P.CON+3.3V
GND

FROM/TO JACK

SW_AUDIO_R[PC]
SW_AUDIO_L[PC]

PCBDSC
CEF156

NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

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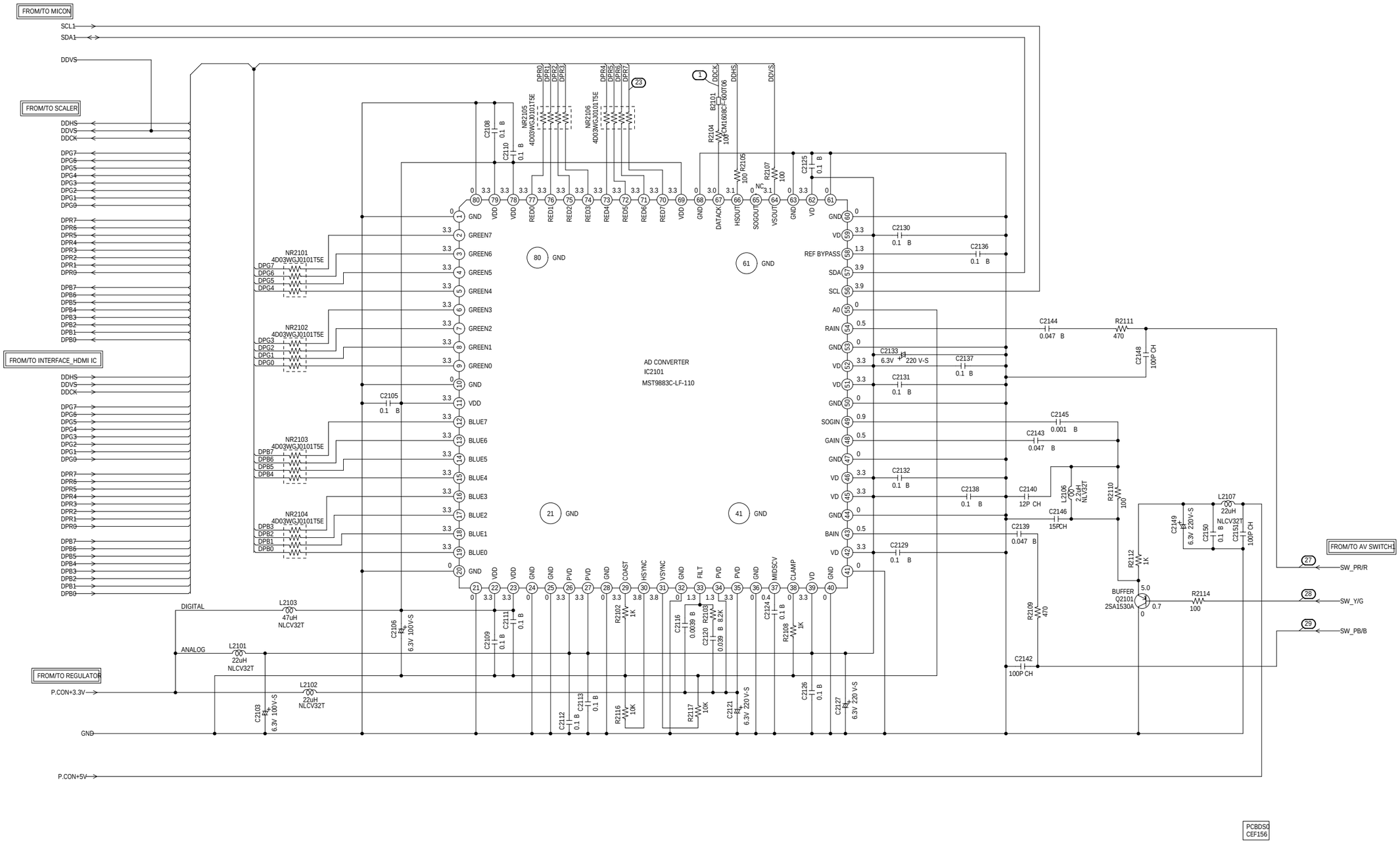
ADC1 SCHEMATIC DIAGRAM

(SCALER PCB)

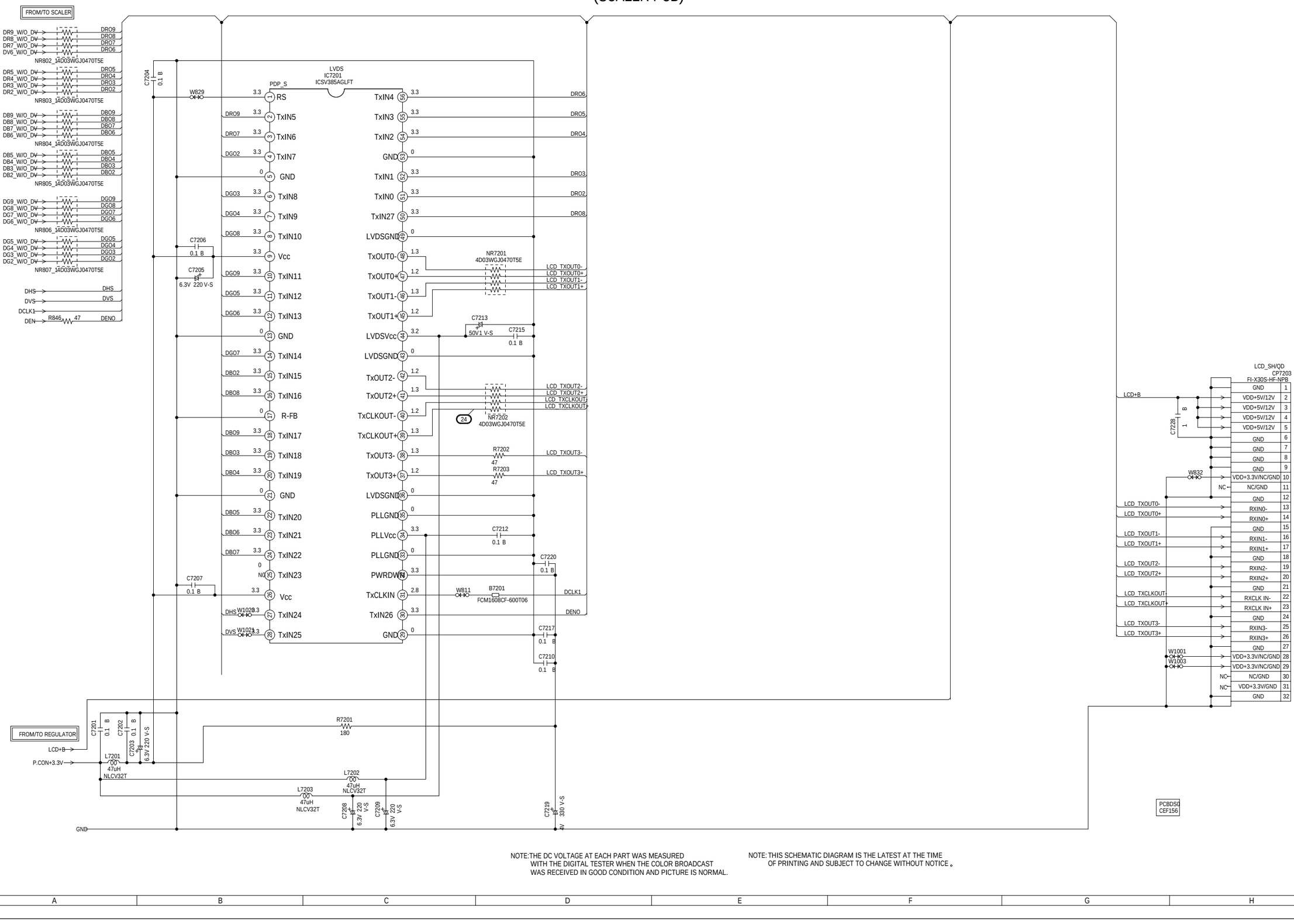


NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

LVDS SCHEMATIC DIAGRAM

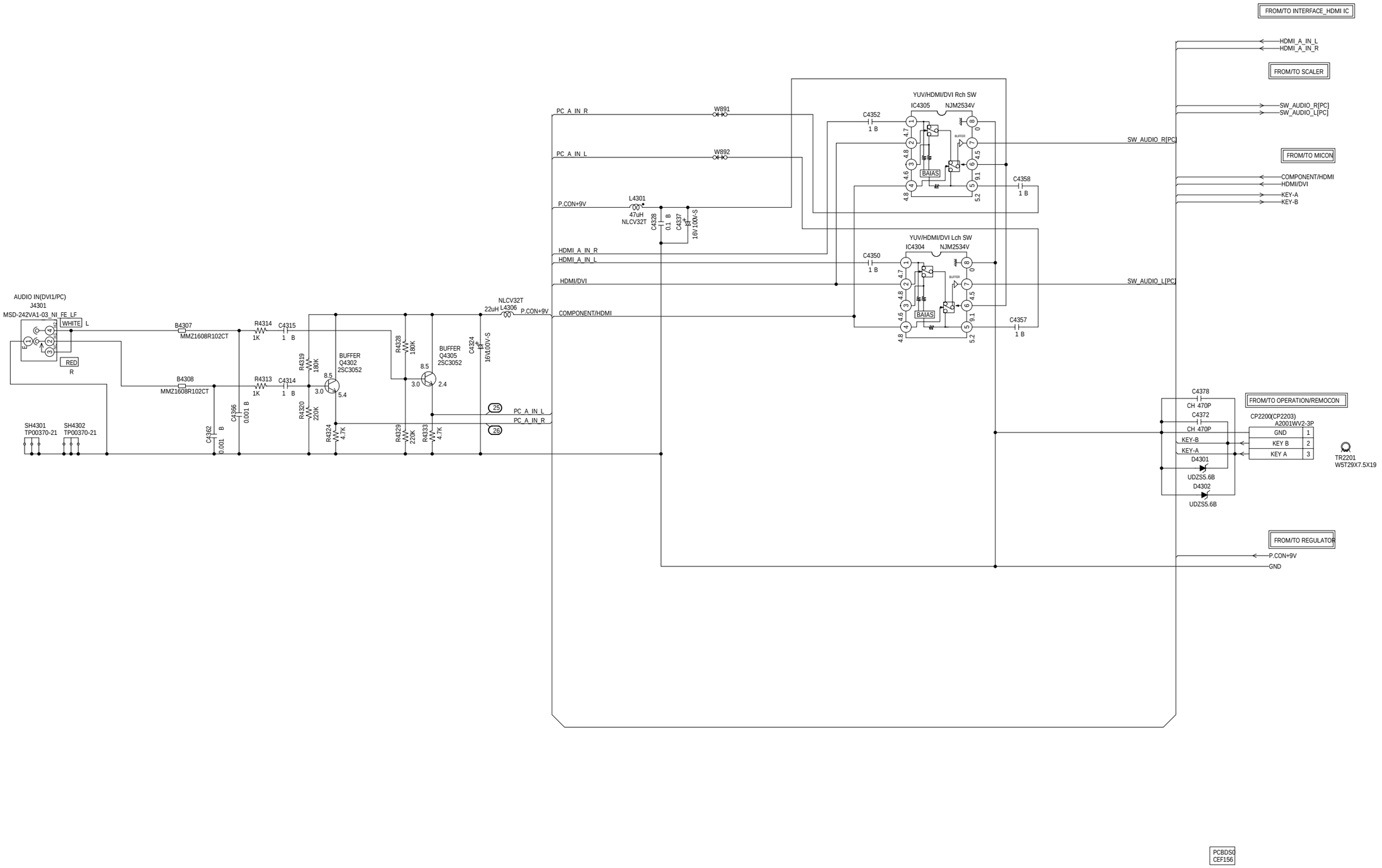
(SCALER PCB)



NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

JACK SCHEMATIC DIAGRAM
(SCALER PCB)

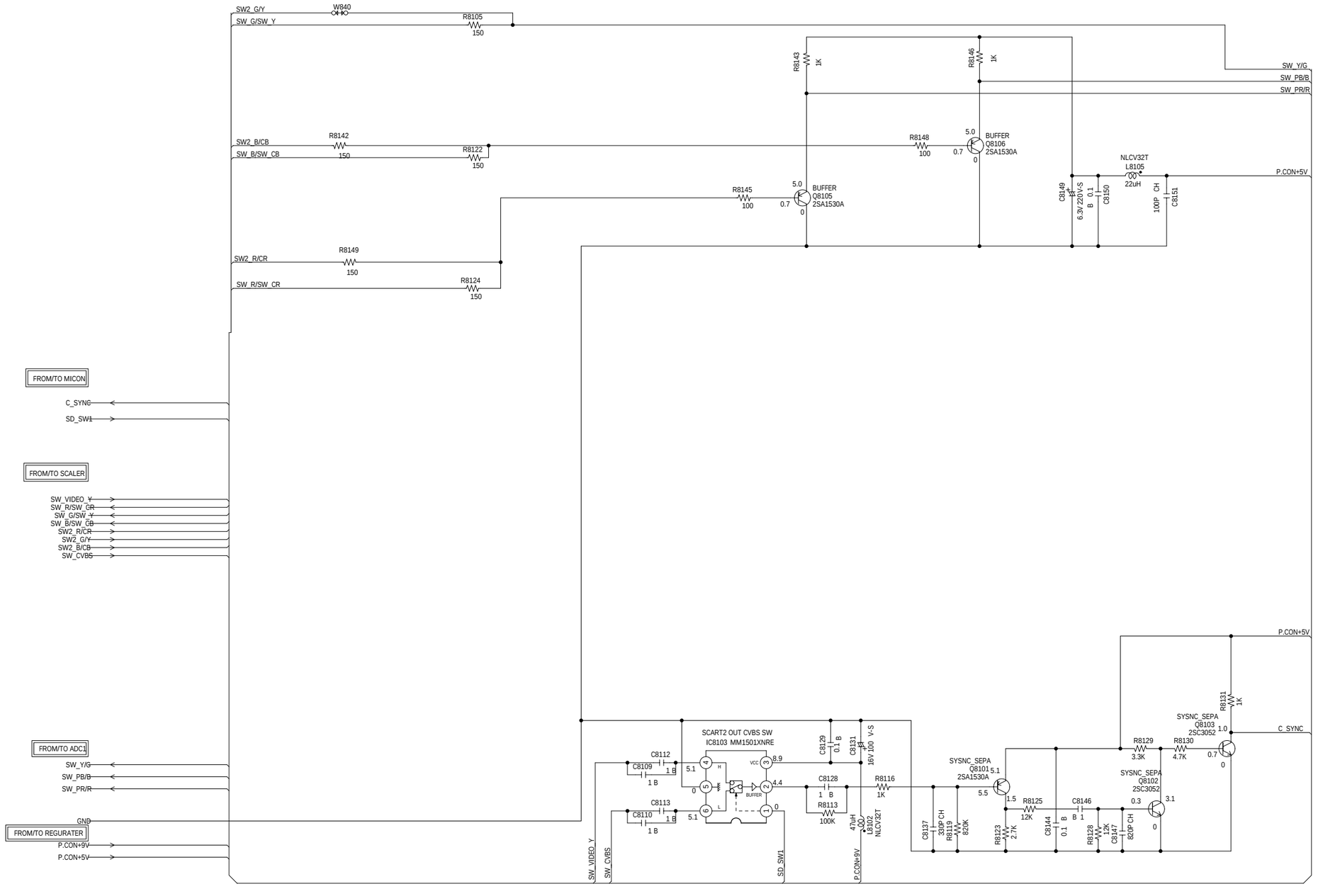


NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

AV SWITCH1 SCHEMATIC DIAGRAM

(SCALER PCB)

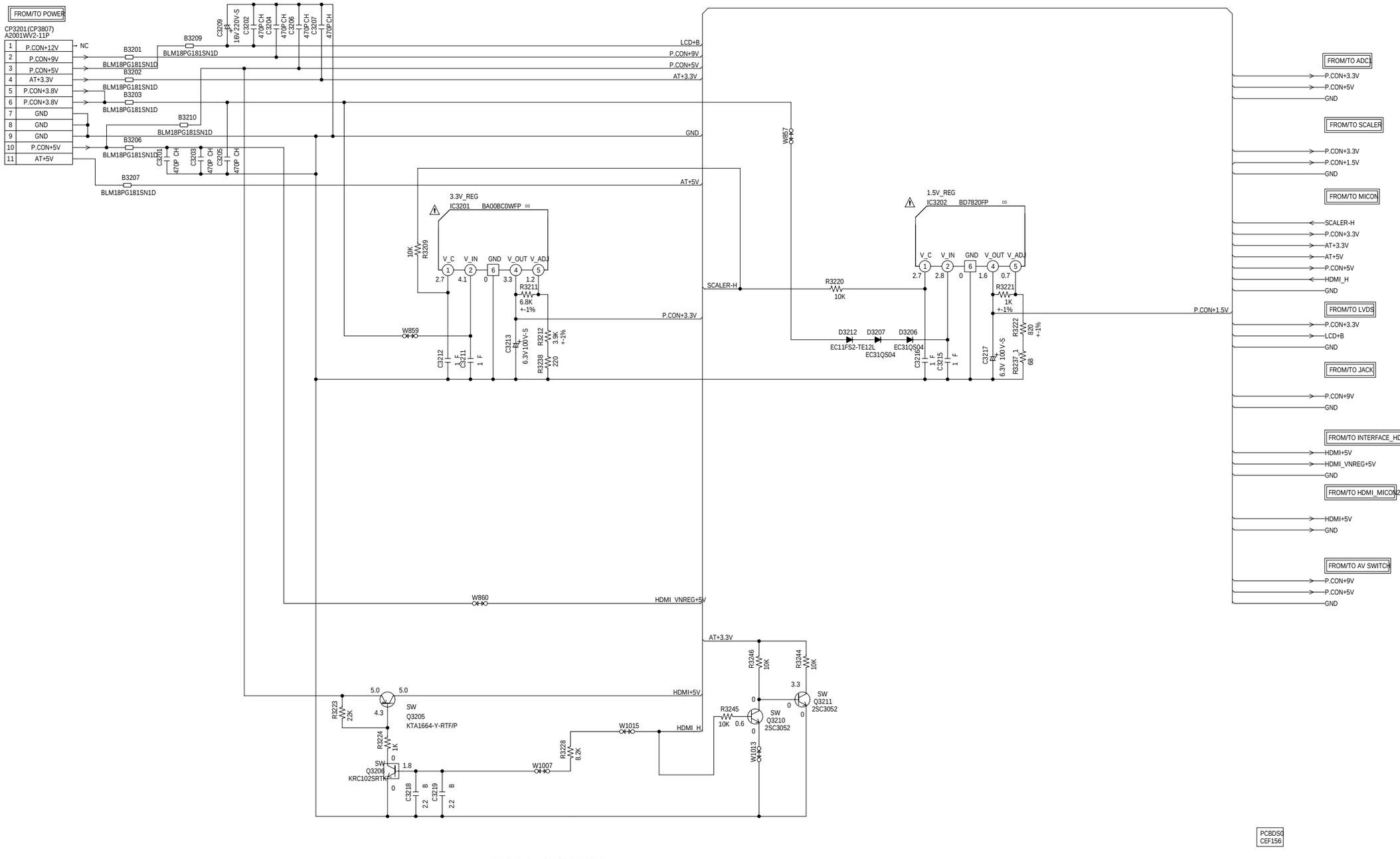


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

REGULATOR SCHEMATIC DIAGRAM

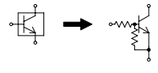
(SCALER PCB)



CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY 。

ATTENTION LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

CAUTION: DIGITAL TRANSISTOR



NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

INTERFACE_HDMI IC SCHEMATIC DIAGRAM

(SCALER PCB)

HDMI CONNECTOR
CP3601 DC1R019JDA
(CP3603)

19	DET
18	POWER
17	GND
16	SDA
15	SCL
14	NC
13	NC
12	CLK-
11	CLK-S
10	CLK+
9	D0-
8	D0-S
7	D0+
6	D1-
5	D1-S
4	D1+
3	D2-
2	D2-S
1	D2+

CP3603 (CP3601)

19	DET
18	POWER
17	GND
16	SDA
15	SCL
14	NC
13	NC
12	CLK-
11	CLK-S
10	CLK+
9	D0-
8	D0-S
7	D0+
6	D1-
5	D1-S
4	D1+
3	D2-
2	D2-S
1	D2+

HDMI CONNECTOR
DC1R019JDA

HDMI_I/F
IC3605
SiI9021CTU

FROM/TO ADC
FROM/TO REGULATOR
FROM/TO MICON
FROM/TO JACK
FROM/TO HDMI MICON2

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

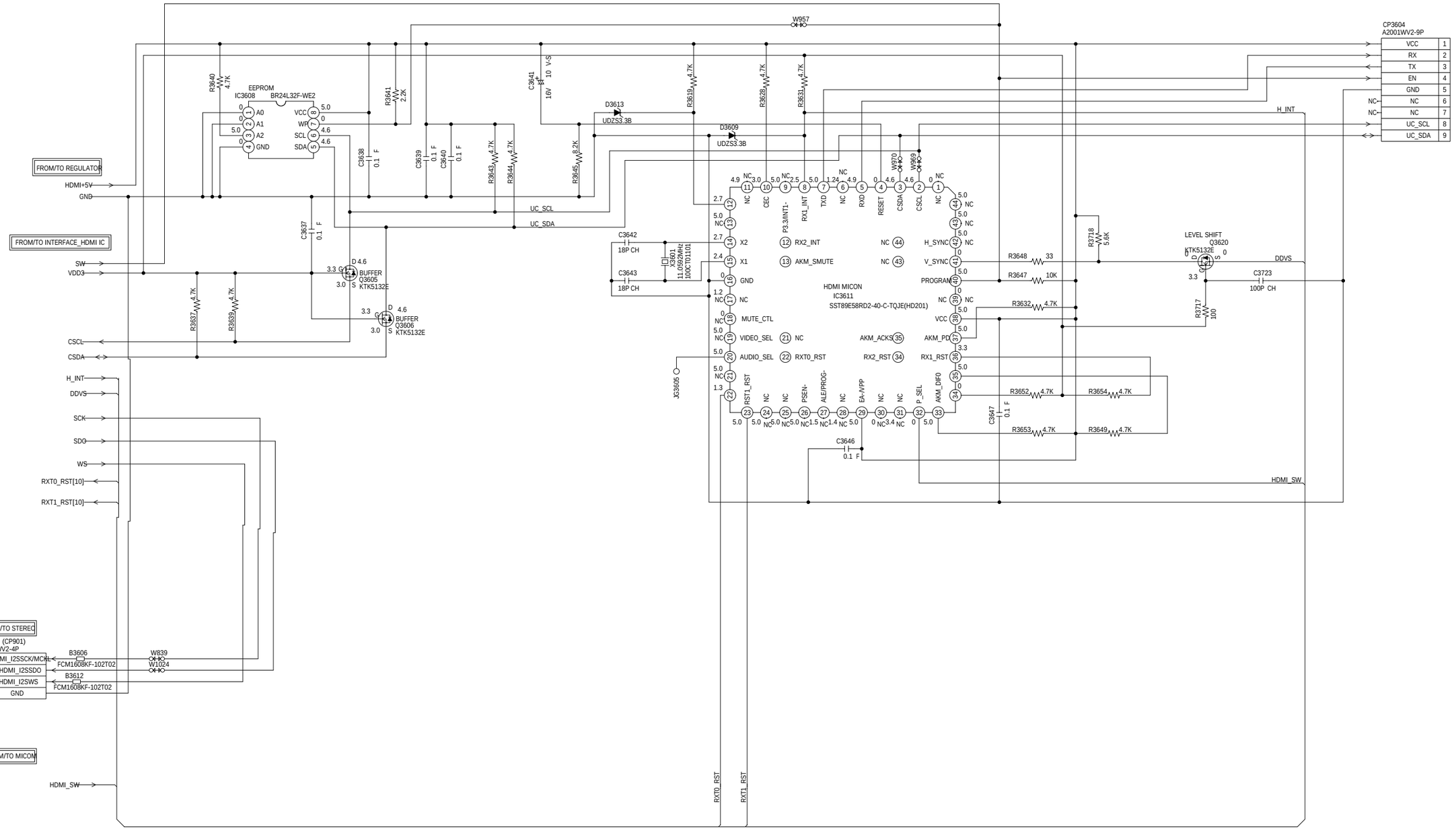
NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION: DIGITAL TRANSISTOR

PCBDS0
CEE156

HDMI MICON2 SCHEMATIC DIAGRAM

(SCALER PCB)

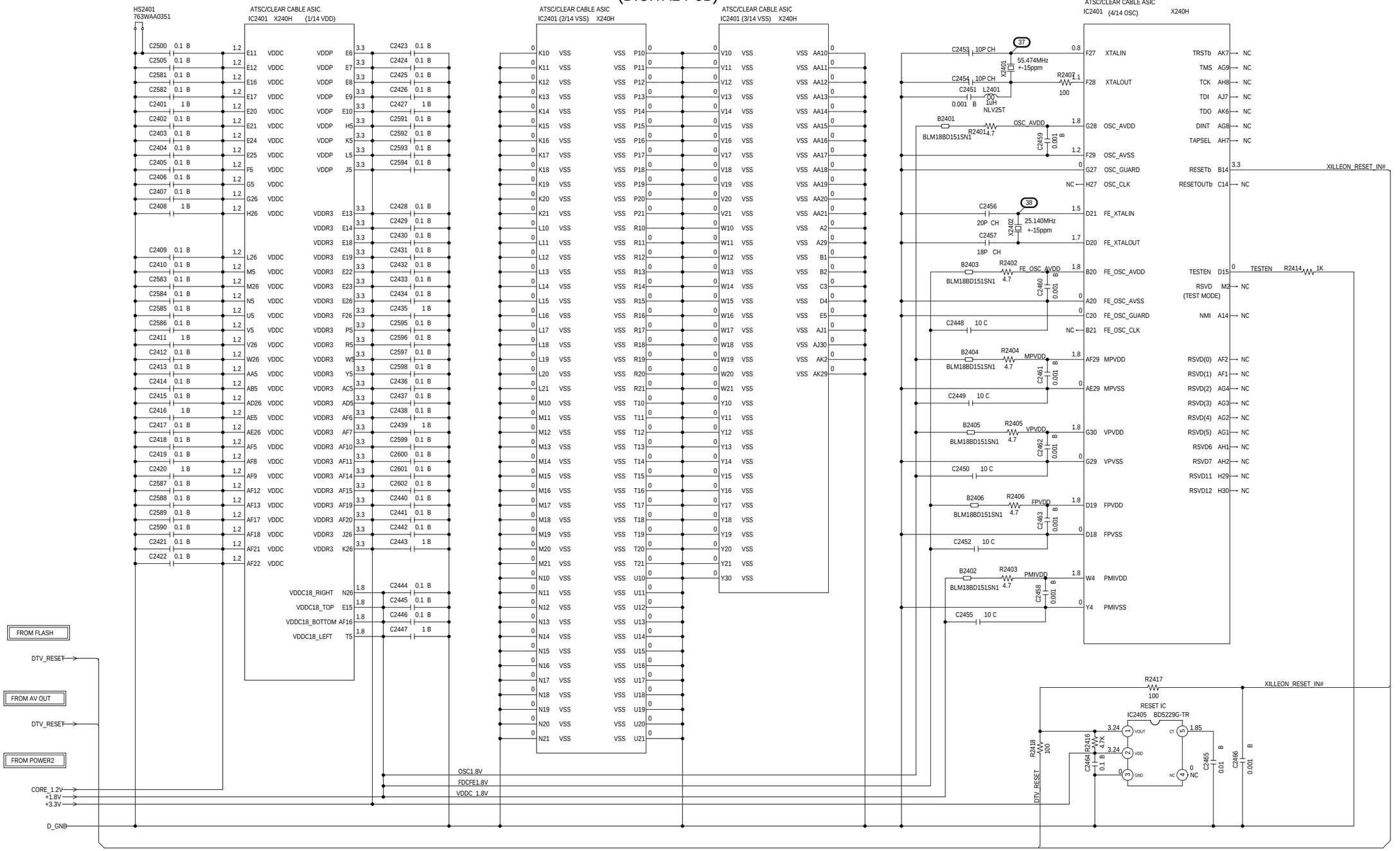


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

ASIC SCHEMATIC DIAGRAM

(DIGITAL PCB)

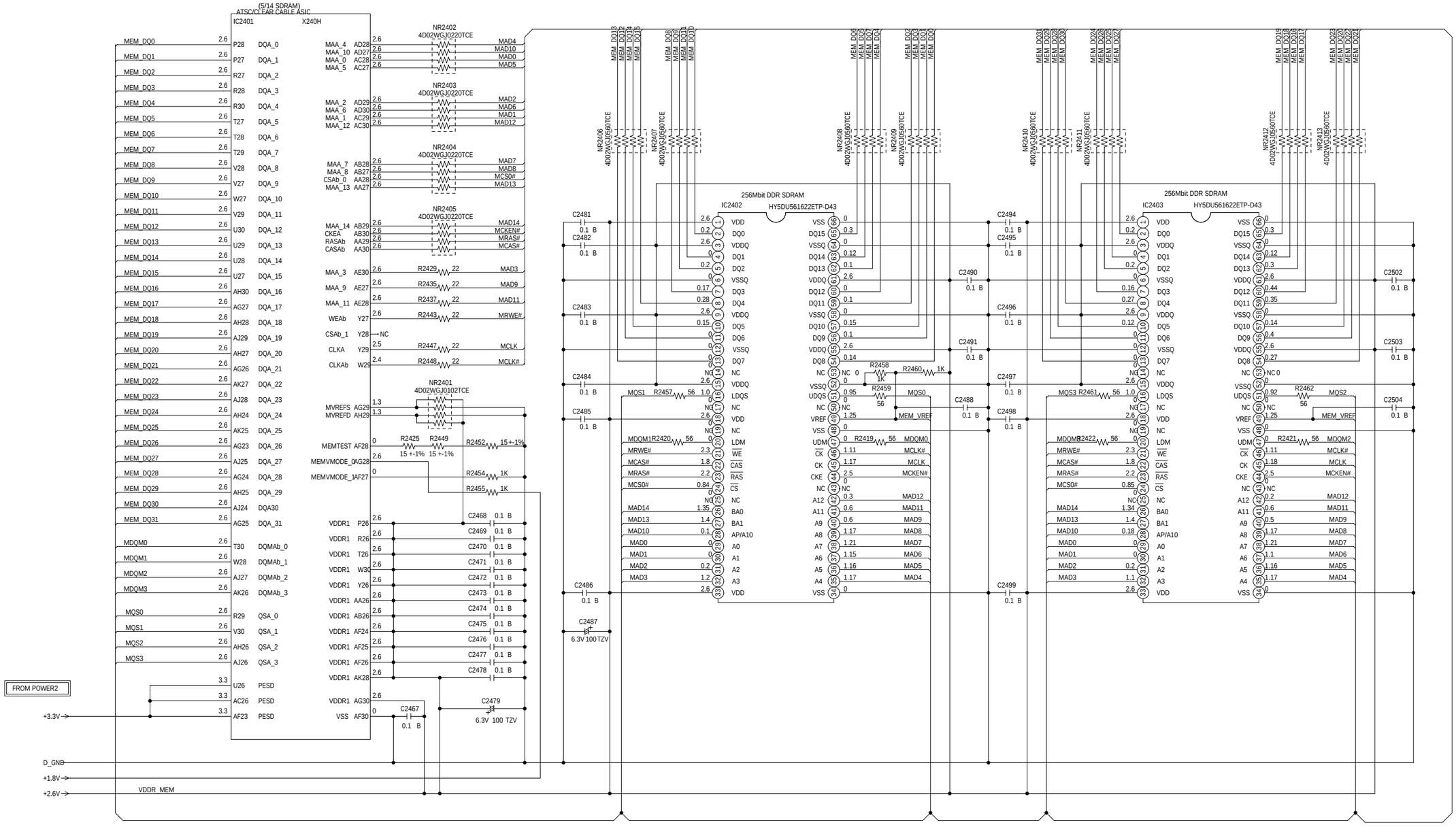


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

SDRAM SCHEMATIC DIAGRAM

(DIGITAL PCB)



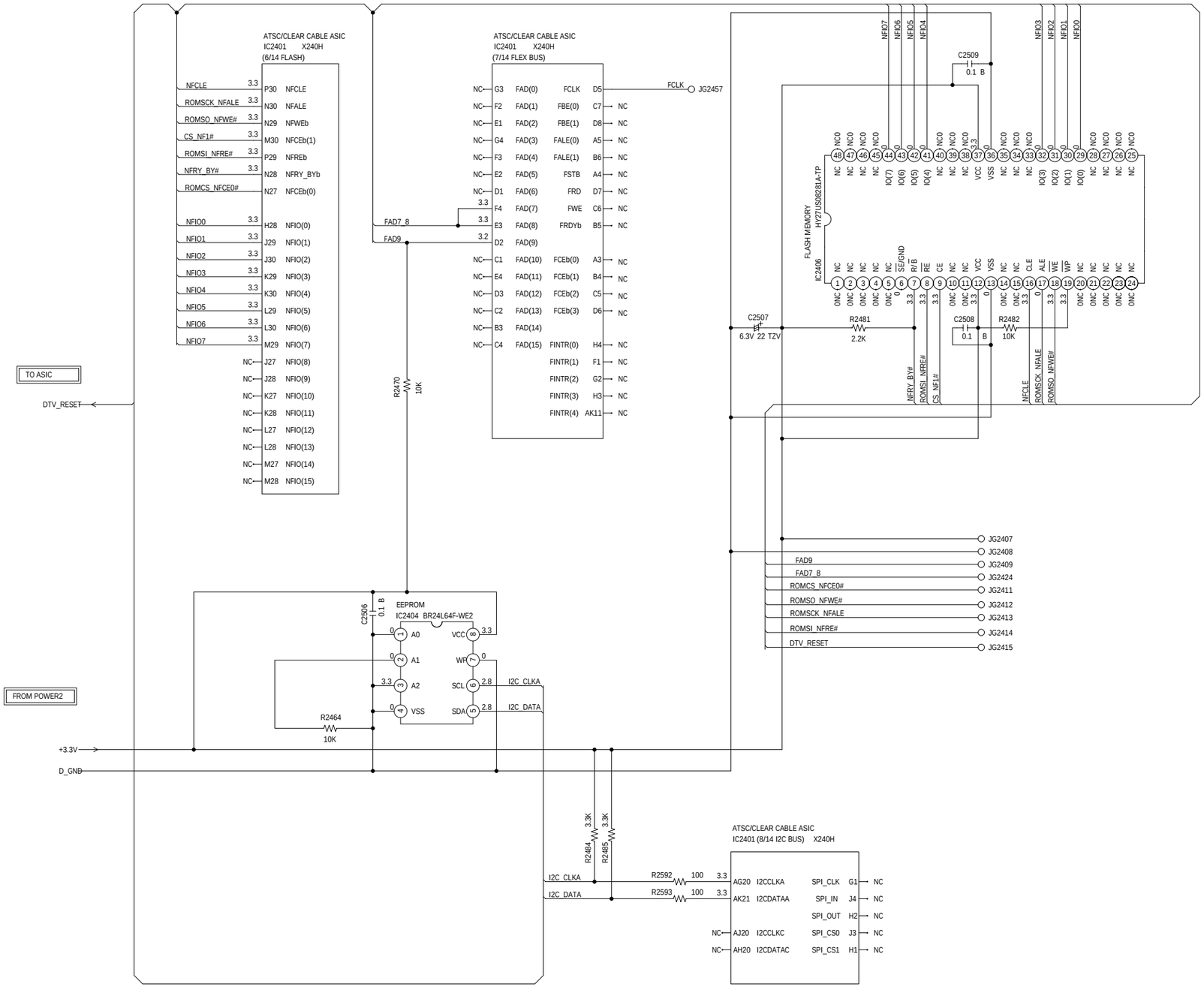
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

PCBDH0
CEF169

FLASH SCHEMATIC DIAGRAM

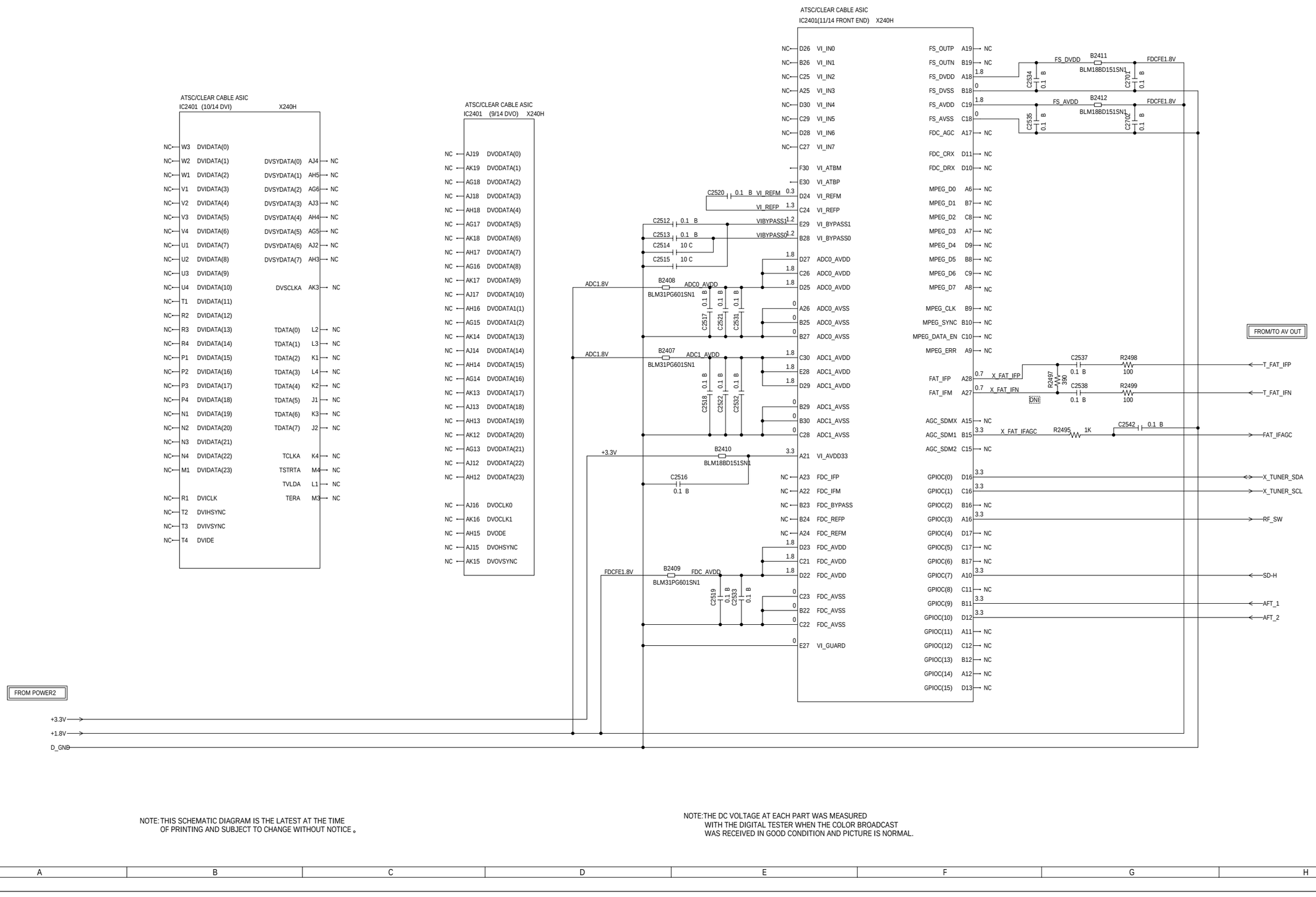
(DIGITAL PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

FRONT END SCHEMATIC DIAGRAM
(DIGITAL PCB)

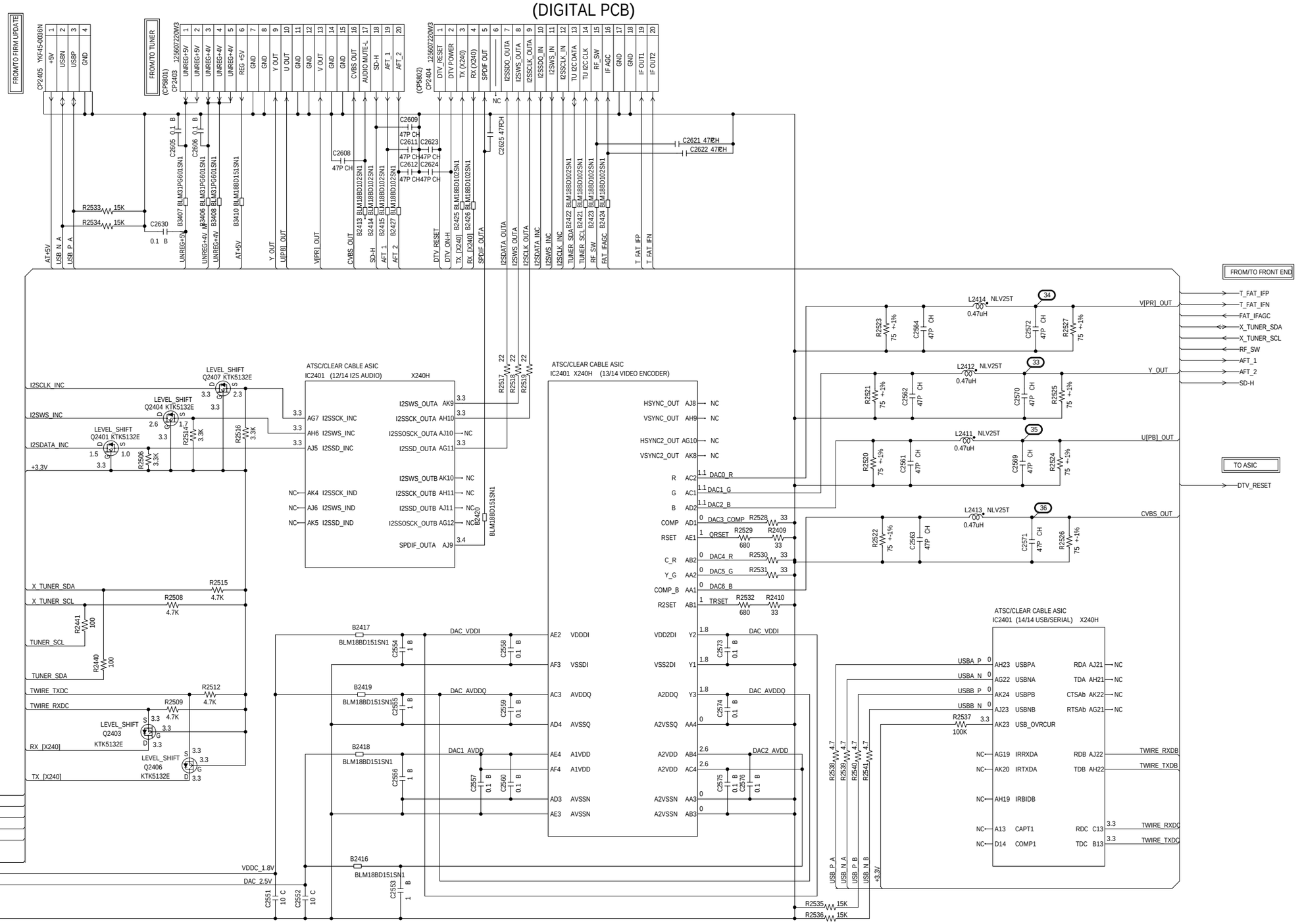


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

AV OUT SCHEMATIC DIAGRAM

(DIGITAL PCB)

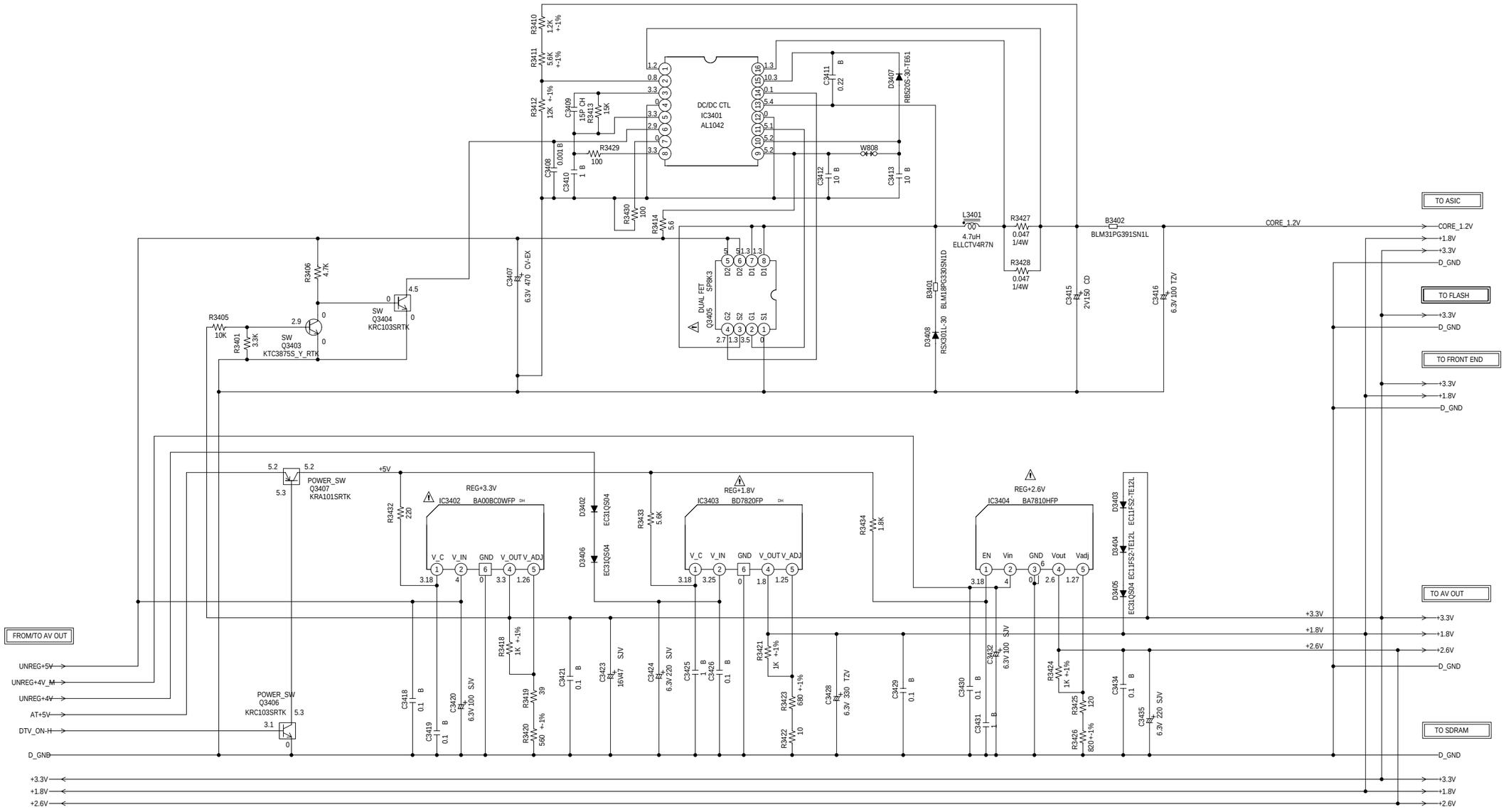


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

POWER2 SCHEMATIC DIAGRAM

(DIGITAL PCB)



PCBDH0
CEF169

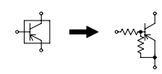
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY 。

ATTENTION: LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

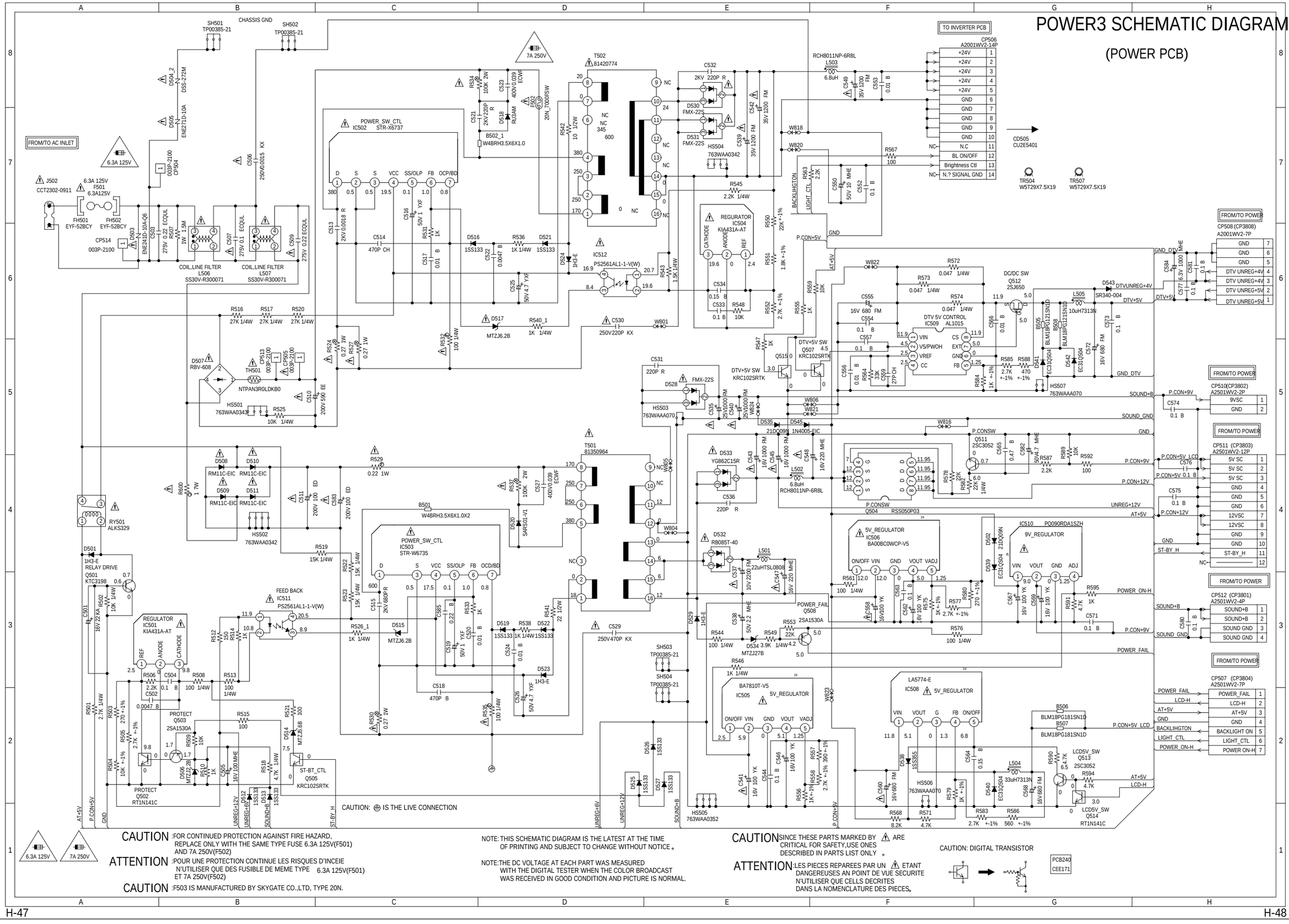
CAUTION: DIGITAL TRANSISTOR



CAUTION: DIGITAL TRANSISTOR

POWER3 SCHEMATIC DIAGRAM

(POWER PCB)


FROM/TO AC INLET
6.3A 125V
7A 250V
J502 CCT2302-0911
F501 6.3A125V
FH501 EYF-52BCY
FH502 EYF-52BCY
CP514 003P-2100
D503 ENE241D-10A-Q6
C503 275V 0.22 ECQUL
R507 1W 1.5M
C507 275V 0.1 ECQUL
C509 275V 0.22 ECQUL
COIL,LINE FILTER L506 SS30V-R300071
COIL,LINE FILTER L507 SS30V-R300071
CP504 003P-2100
D504_2 DSS-272M
D505 ENE271D-10A
C506 250V0.0015 KX
SH501 TP00385-21
SH502 TP00385-21
CHASSIS GND
D507 RBV-608
TH501
C513 003P-2100
CP505 003P-2100
NTPAN3R0LDKB0
C510 200V 560 EE
HS501 763WAA0343
R525 10K 1/4W
R516 27K 1/4W
R517 27K 1/4W
R520 27K 1/4W
R524 0.27 1W
R527 0.27 1W
R532 100 1/4W
D517 MTZJ6.2B
R540_1 1K 1/4W
C530 250V220P KX
W801
T502 81420774
R534 100K 2W
C523 400V0.039 ECWF
C521 2KV 220P R
D518 RG3AM
F502 20N_7000FSW
B502_1 W4BRH3.5X6X1.0
POWER_SW_CTL IC502 STR-X6737
D S S VCC SS/OLP FB OCP/BD
380 0.5 0.5 19.5 0.1 1.0 0.8
C513 2KV 0.0018 R
C514 470P CH
C516 50V 1 YXF
R531 1K
C517 0.01 B
D516 1SS133
R536 1K 1/4W
D521 1SS133
D524 1H3-E
C522 0.0047 B
C525 50V 4.7 YXF
R542 10 1/2W
R543 1.5K 1/4W
IC512 PS2561AL1-1-V(W)
R532 100 1/4W
C532 2KV 220P R
D530 FMX-22S
D531 FMX-22S
HS504 763WAA0342
C542 35V 1200 FM
C539 35V 1200 FM
R545 2.2K 1/4W
REGURATOR IC504 KIA431A-AT
CATHODE ANODE REF
R550 22K +-1%
R551 1.8K +-1%
C534 0.15 B
C533 0.1 B
R548 10K
R552 2.7K +-1%
R555 1K
R559 10K
W818
W820
BACKLIHGTON LIGHT_CTL
R563 2.2K
C550 50V 10 MHE
C552 0.1 B
R567 100
TO INVERTER PCB
CP506 A2001WV2-14P
+24V 1
+24V 2
+24V 3
+24V 4
+24V 5
GND 6
GND 7
GND 8
GND 9
GND 10
N.C 11
BL ON/OFF 12
Brightness Ctl 13
N.? SIGNAL GND 14
CD505 CU2E5401
TR504 W5T29X7.5X19
TR507 W5T29X7.5X19
RCH8011NP-6R8L L503 6.8uH
C549 35V 1200 FM
C553 0.01 B
P.CON+5V
GND
W822
R572 0.047 1/4W
R573 0.047 1/4W
R574 0.047 1/4W
DC/DC SW Q512 2SJ650
L505 10uH7313N
D543 SR340-004
DTVUNREG+4V
DTV+5V
DTV 5V CONTROL IC509 AL1015
VIN CS VS/PWOH EXT VREF GND CC FB
C555 16V 680 FM
C554 0.1 B
C557 0.1 B
C556 0.01 B
R564 33K
C559 27PCH
R584 1K +-1%
R585 2.7K +-1%
R588 470 +-1%
C566 0.01 B
D505 BLM18PG121SN1D
D508 BLM18PG121SN1D
D541 EC31QS04
D542 EC31QS04
C572 16V 680 FM
C573 0.1 B
HS507 763WAAA070
GND_DTV
SOUND+B
SOUND_GND
P.CONSW
Q511 2SC3052
C565 0.47 B
C582 50V 4.7 MHE
R587 2.2K
R589 1K
R592 100
P.CON+9V
P.CON+12V
UNREG+12V
AT+5V
C584 6.3V 1000 MHE
C581 0.1 B
C577 6.3V 1000 MHE
C574 0.1 B
C576 0.1 B
C575 0.1 B
FROM/TO POWER
CP508 (CP3808) A2001WV2-7P
GND 7
GND 6
GND 5
DTV UNREG+4V 4
DTV UNREG+4V 3
DTV UNREG+5V 2
DTV UNREG+5V 1
CP510(CP3802) A2501WV2-2P
9VSC 1
GND 2
CP511 (CP3803) A2501WV2-12P
5V SC 1
5V SC 2
5V SC 3
GND 4
GND 5
GND 6
12VSC 7
12VSC 8
GND 9
GND 10
ST-BY_H 11
NC 12
CP512 (CP3801) A2501WV2-4P
SOUND+B 1
SOUND+B 2
SOUND GND 3
SOUND GND 4
CP507 (CP3804) A2501WV2-7P
POWER_FAIL 1
LCD-H 2
AT+5V 3
GND 4
BACKLIHGTON 5
LIGHT_CTL 6
POWER ON-H 7
P.CON+5V_LCD
P.CON+5V 0.1 B
P.CON+12V
UNREG+12V
AT+5V
GND
ST-BY_H
POWER_ON-H
SOUND+B
SOUND_GND
POWER_FAIL
P.CON+9V
R595 1K
C571 0.1 B
C580 0.1 B
R576 100 1/4W
Q508 2SA1530A
R553 22K
R544 100 1/4W
R549 1/4W
D534 3.9K MTZJ27B
R546 1K 1/4W
BA7810T-V5 IC505 5V_REGULATOR
ON/OFF VIN GND VOUT VADJ
C541 16V 100 YK
C544 0.1 B
C546 16V 100 YK
R557 390 +-1%
R558 2.7K +-1%
R556 1K +-1%
D526 1SS133
D525 1SS133
D527 1SS133
D528 FMX-22S
HS503 763WAAA070
C535 25V1000 FM
C540 25V1000 FM
W806
W821
D535 21DQ09N
D545 1N4005-EIC
W816
C543 16V 1000 FM
C545 16V 1000 FM
C548 16V 220 MHE
L502 6.8uH RCH8011NP-6R8L
D533 YG862C15R
C536 220P R
Q504 RSS050P03
5V_REGULATOR IC506 BA00BC0WCP-V5
ON/OFF VIN GND VOUT VADJ
R561 100 1/4W
C558 16V100 YK
C562 0.1 B
C563 16V 100 YK
R575 1K +-1%
R577 2.7K +-1%
R580 270 +-1%
IC510 PQ090RDA1SZH 9V_REGULATOR
VIN VOUT GND ADJ
D502 21DQ09N
D539 EC31QS04
C567 16V 100 YK
C569 16V 100 YK
R591 4.7K
D532 RB085T-40
L501 22uHTSL0808
C537 10V 2200 FM
C547 16V 220 MHE
D529 1H3-E
C538 50V 2.2 MHE
POWER_FAIL Q508 2SA1530A
LA5774-E IC508 5V_REGULATOR
VIN VOUT G FB ON/OFF
B506 BLM18PG181SN1D
B507 BLM18PG181SN1D
D538 1SS355
C560 16V 680 FM
HS506 763WAAA070
R579 1K +-1%
C564 0.15 B
L504 33uH7313N
D540 EC31QS04
C568 16V 680 FM
R590 4.7K
LCD5V_SW Q513 2SC3052
R594 4.7K
LCD5V_SW Q514 RT1N141C
R568 8.2K
R571 4.7K
R583 2.7K +-1%
R586 560 +-1%
HS505 763WAA0352
SH503 TP00385-21
SH504 TP00385-21
W823
T501 81350964
R529 0.22 1W
R537 100K 2W
C527 400V0.039 ECWF
B501 W4BRH3.5X6X1.0X2
D520 SARS01-V1
POWER_SW_CTL IC503 STR-W6735
D S VCC SS/OLP FB OCD/BD
600 0.5 17.5 0.1 1.0 0.8
C515 2KV 680PR
R526_1 1K 1/4W
D515 MTZJ6.2B
C529 250V470P KX
C518 470P B
D519 1SS133
R538 1K 1/4W
D522 1SS133
D523 1H3-E
C524 0.01 B
C526 50V 4.7 YXF
R535 100 1/4W
R530 0.27 1W
R600 1 7W
D508 RM11C-EIC
D510 RM11C-EIC
D509 RM11C-EIC
D511 RM11C-EIC
C511 200V 100 ED
C583 200V 100 ED
HS502 763WAA0342
RY501 ALKS329
D501 1H3-E RELAY DRIVE
Q501 KTC3198
R502 10K 1/4W
C501 16V 22 KA
R519 15K 1/4W
R522 15K 1/4W
R523 15K 1/4W
FEED BACK IC511 PS2561AL1-1-V(W)
REGURATOR IC501 KIA431A-AT
REF ANODE CATHODE
R506 2.2K 0.1 B
C504
R508 100 1/4W
C502 0.0047 B
R512 150
R514 1K
R513 100 1/4W
R501 2.7K 1/4W
R503 270 +-1%
R505 2.7K +-1%
R504 10K +-1%
PROTECT Q503 2SA1530A
R509 10K
R510 1K
D506 MTZJ2.2B
C505 16V 100 MHE
R515 100
R521 100
D514 MTZJ5.6B
R518 4.7K 1/4W
ST-BT_CTL Q505 KRC102SRTK
PROTECT Q502 RT1N141C
D512 1SS133
D513 1SS133
C531 220P R
D528 FMX-22S
R547 1K
DTV+5V SW Q507 KRC102SRTK
Q515
W804
W805
C530
C528
C529
C518
C526
C535
C540
C541
C542
C543
C544
C545
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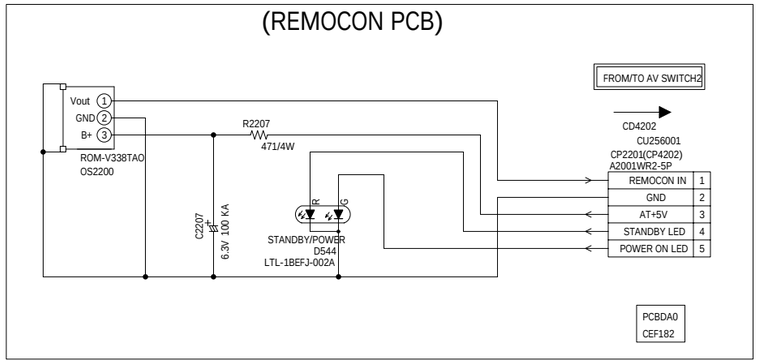
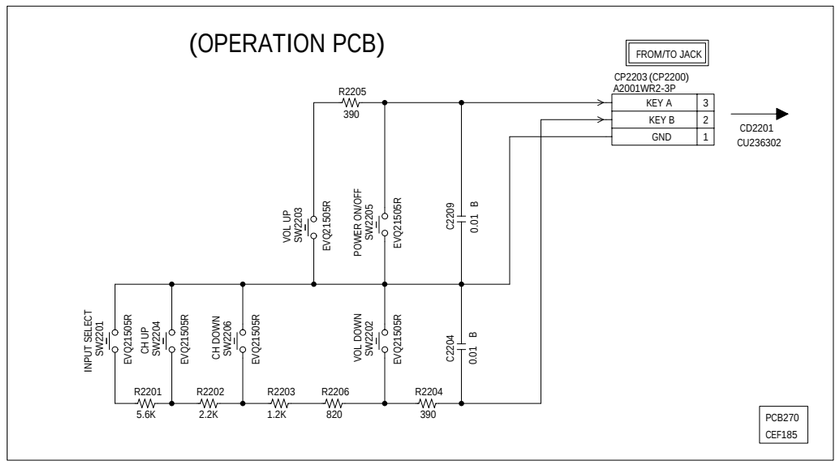
C625
C626

OPERATION/REMOCON SCHEMATIC DIAGRAM

(REMOCON PCB)



(OPERATION PCB)



NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

INTERCONNECTION DIAGRAM

CP506	
1	+24V
2	+24V
3	+24V
4	+24V
5	+24V
6	GND
7	GND
8	GND
9	GND
10	GND
11	N.C
12	BL ON/OFF
13	Brightness Ctl
14	N.? SIGNAL GND

POWER PCB
PCB240
CEE171

CD3801 — J502

CP510		CD3802	CP3802	
9VSC	1	→	1	9VSC
GND	2	→	2	GND

CP512		CD3805	CP3801	
SOUND+B	1	→	1	SOUND+B
SOUND+B	2	→	2	SOUND+B
SOUND GND	3	→	3	SOUND GND
SOUND GND	4	→	4	SOUND GND

CP508		CD3806	CP3808	
GND	7	→	7	GND
GND	6	←	6	GND
GND	5	→	5	GND
DTV UNREG+4V	4		4	DTV UNREG+4V
DTV UNREG+4V	3	←	3	DTV UNREG+4V
DTV UNREG+5V	2	→	2	DTV UNREG+5V
DTV UNREG+5V	1		1	DTV UNREG+5V

CP511		CD3803	CP3803	
5VSC	1	→	1	5VSC
5VSC	2	→	2	5VSC
5VSC	3	→	3	5VSC
GND	4		4	GND
GND	5		5	GND
GND	6		6	GND
12VSC	7	→	7	12VSC
12VSC	8	→	8	12VSC
GND	9		9	GND
GND	10		10	GND
ST-BY_H	11	←	11	ST-BY_H
———	12	→	12	———

CP507		CP3804	
POWER_FAIL	1	1	POWER_FAIL
LCD-H	2	2	LCD-H
AT+5V	3	3	AT+5V
GND	4	4	GND
BACKLIGHT ON	5	5	BACKLIGHT ON
LIGHT_CTL	6	6	LIGHT_CTL
POWER ON-H	7	7	POWER ON-H

AV PCB
PCBD20
CMF080

CP2403		CP5801(CP2403)	
UNREG+5V	1	1	UNREG+5V
UNREG+5V	2	2	UNREG+5V
UNREG+4V	3	3	UNREG+4V
UNREG+4V	4	4	UNREG+4V
UNREG+4V	5	5	UNREG+4V
REG +5V	6	6	REG +5V
GND	7	7	GND
GND	8	8	GND
Y OUT	9	9	Y OUT
U OUT	10	10	U OUT
GND	11	11	GND
GND	12	12	GND
V OUT	13	13	V OUT
GND	14	14	GND
GND	15	15	GND
CVBS OUT	16	16	CVBS OUT
AUDIO MUTE-L	17	17	AUDIO MUTE-L
SD-H	18	18	SD-H
AFT(0)	19	19	AFT_1
AFT(1)	20	20	AFT_2

CP2404		CP5802 (CP2404)	
DTV_RESET	1	1	DTV_RESET
DTV POWER	2	2	DTV POWER
TX (X240)	3	3	TX (X240)
RX (X240)	4	4	RX (X240)
SPDIF OUT	5	5	SPDIF OUT
———	6	6	———
I2SSDO_OUTA	7	7	I2SSDO_OUTA
I2SWS_OUTA	8	8	I2SWS_OUTA
I2SSCLK_OUTA	9	9	I2SSCLK_OUTA
I2SSDO_IN	10	10	I2SSDO_IN
I2SWS_IN	11	11	I2SWS_IN
I2SSCLK_IN	12	12	I2SSCLK_IN
TU I2C DATA	13	13	TU I2C DATA
TU I2C CLK	14	14	TU I2C CLK
RF_SW	15	15	RF_SW
IF AGC	16	16	IF AGC
GND	17	17	GND
GND	18	18	GND
IF OUT1	19	19	IF OUT1
IF OUT2	20	20	IF OUT2

DIGITAL PCB
PCBDH0
CEF169

CP2405	
1	+5V
2	USBN
3	USBP
4	GND

4 OHM 10W (L) SPEAKER — SP302 — CD303
4 OHM 10W (R) SPEAKER — SP301 — CD301

CP303		CP301	
SP OUT L+	2	SP OUT R-	3
SP OUT L-	1	NC	2
		SP OUT R+	1

CS_IN 4/5
J4211

H2-1	RED
H1	RED
H2-1	BLUE
H1	BLUE
H2-1	GREEN
H1	GREEN

AUDIO_IN 4/5
J4204

NO-1	RED
H2-1	RED
NC	
H1-1	
H1	WHITE
H2-1	WHITE

CP4204		FFC CD4204	CP802	
STANDBY LED	30	30 → 1	1	STANDBY LED
REMOCON IN	29	29 → 2	2	REMOCON IN
AFT	28	28 → 3	3	AFT
———	27	27 → 4	4	———
———	26	26 → 5	5	———
AUDIO_MUTE	25	25 → 6	6	AUDIO_MUTE
EXT_MUTE-H	24	24 → 7	7	EXT_MUTE-H
GND	23	23 → 8	8	GND
SCART1_B	22	22 → 9	9	SCART1_B
GND	21	21 → 10	10	GND
SCART1_G	20	20 → 11	11	SCART1_G
GND	19	19 → 12	12	GND
SCART1_R	18	18 → 13	13	SCART1_R
GND	17	17 → 14	14	GND
AFT_2/DTV-CVBS	16	16 → 15	15	AFT_2/DTV_CVBS
GND	15	15 → 16	16	GND
NC SCART1_Y	14	14 → 17	17	SCART1_Y
———	13	13 → 18	18	———
———	12	12 → 19	19	———
POWER_FAIL	11	11 → 20	20	POWER_FAIL
POWER_ON-H	10	10 → 21	21	POWER_ON-H
AFT_1	9	9 → 22	22	AFT_1
LCDON	8	8 → 23	23	LCDON
NC DVB_FAN_ON-H	7	7 → 24	24	DVB_FAN_ON-H
LCD-H/PDP_RLY	6	6 → 25	25	LCD-H/PDP_RLY
NC S_DET	5	5 → 26	26	S_DET
———	4	4 → 27	27	———
SW_YUV1/2	3	3 → 28	28	SW_YUV1/2
———	2	2 → 29	29	———
LIGHT CTL/PSU_5VD	1	1 → 30	30	LIGHT CTL/PSU_5VD NC

CP4203		FFC CD4203	CP803	
———	29	29 → 1	1	———
DTUNER_H	28	28 → 2	2	DTUNER_H
DTV_MUTE_L	27	27 → 3	3	DTV_MUTE_L
———	26	26 → 4	4	———
DTUNER_RX	25	25 → 5	5	DTUNER_RX
GND	24	24 → 6	6	GND
DTUNER_TX	23	23 → 7	7	DTUNER_TX
GND	22	22 → 8	8	GND
DTUNER_RESET_L	21	21 → 9	9	DTUNER_RESET_L
GND	20	20 → 10	10	GND
SW_AUDIO_R(PC)	19	19 → 11	11	SW_AUDIO_R(PC)
GND	18	18 → 12	12	GND
SW_AUDIO_L(PC)	17	17 → 13	13	SW_AUDIO_L(PC)
———	16	16 → 14	14	———
STEREO_RESET	15	15 → 15	15	STEREO_RESET
———	14	14 → 16	16	———
NC SCART_AUDIO_SW	13	13 → 17	17	SCART_AUDIO_SW
SDA1	12	12 ↔ 18	18	SDA1
SCL1	11	11 → 19	19	SCL1
GND	10	10 → 20	20	GND
DTUNER_POWER	9	9 → 21	21	DTUNER_POWER
GND	8	8 → 22	22	GND
DTUNER_SD_H	7	7 → 23	23	DTUNER_SD_H
GND	6	6 → 24	24	GND
SWITCH_CVBS	5	5 → 25	25	SWITCH_CVBS
GND	4	4 → 26	26	GND
SWITCH_VIDEO_Y	3	3 → 27	27	SWITCH_VIDEO_Y
GND	2	2 → 28	28	GND
SWITCH_VIDEO_C	1	1 → 29	29	SWITCH_VIDEO_C

CP901		CD901	CP3602	
HDMI_I2SSCK/MCKL	4	→	4	HDMI_I2SSCK/MCKL
HDMI_I2SSDO	3	→	3	HDMI_I2SSDO
HDMI_I2SWS	2	→	2	HDMI_I2SWS
GND	1	→	1	GND

CP3807		CD3807	CP3201	
P.CON12V	1	→	1	P.CON12V
P.CON+9V	2	→	2	P.CON+9V
P.CON+5V	3	→	3	P.CON+5V
AT3.3V	4	→	4	AT3.3V
P.CON+3.8V	5	→	5	P.CON+3.8V
P.CON+3.8V	6	→	6	P.CON+3.8V
GND	7	→	7	GND
GND	8	→	8	GND
GND	9	→	9	GND
P.CON+5V	10	→	10	P.CON+5V
AT+5V	11	→	11	AT+5V

AUDIO OUT
J4201 — R, L

COAXIAL JACK
J4202

WHITE L, RED R
AUDIO IN(DVI1/PC)
J4301

SCALER PCB
PCBDS0
CEF156

CP3601		CP3603	
DET	19	DET	19
POWER	18	POWER	18
GND	17	GND	17
SDA	16	SDA	16
SCL	15	SCL	15
———	14	———	14
———	13	———	13
CLK-	12	CLK-	12
CLK-S	11	CLK-S	11
CLK+	10	CLK+	10
D0-	9	D0-	9
D0-S	8	D0-S	8
D0+	7	D0+	7
D1-	6	D1-	6
D1-S	5	D1-S	5
D1+	4	D1+	4
D2-	3	D2-	3
D2-S	2	D2-S	2
D2+	1	D2+	1

CP103	
NC	7
RESET	6
CHIP_SELECT	5
4SI_SCL	4
4SI_SDA_IN	3
4SI_SDA_OUT	2
GND	1

CP101	
GND	1
EEPROM_SCL	2
EEPROM_SDA	3
IIC_OFF	4
GND	5

MICON_DATA

CP102	
GND	1
TX	2
BUSY	3
NC ———	4
VCC	5
CLK	6
RX	7
CNVSS	8
RESET	9
GND	10

CP7203	
GND	1
VDD+5V/12V	2
VDD+5V/12V	3
VDD+5V/12V	4
VDD+5V/12V	5
GND	6
GND	7
GND	8
GND	9
VDD+3.3V/NC/GND	10
NC NC/GND	11
GND	12
RXIN0-	13
RXIN0+	14
GND	15
RXIN1-	16
RXIN1+	17
GND	18
RXIN2-	19
RXIN2+	20
GND	21
RXCLK IN-	22
RXCLK IN+	23
GND	24
RXIN3-	25
RXIN3+	26
GND	27
VDD+3.3V/NC/GND	28
VDD+3.3V/NC/GND	29
NC NC/GND	30
NC VDD+3.3V/GND	31
GND	32

TO LCD PANEL
CD7204 → PANEL
V2301_1

DIGITAL/ANALOG TUNER W/NTSC_MPX
TU5801

NC	OOB
	+5V
	GND
	+30V
NC	TU
	GND
	+5V
	AGC
	SDA
	SCL
	AFT
	AGC_OUT
	V_OUT
	+5V
	SIF
	IF SW
	IF OUT
	IF AGC
	IF_OUT 1
	IF_OUT 2

COMMAND TRANSMITTER
TM101

OS2200: B+, GND, Vout

CP4202		CD4202	CP2201	
REMOCON IN	1	→	1	REMOCON IN
GND	2	→	2	GND
AT+5V	3	→	3	AT+5V
STANDBY LED	4	→	4	STANDBY LED
P.ON LED	5	→	5	P.ON LED

REMOCON PCB
PCBDA0
CEF182

OPERATION PCB
PCB270
CEF185

CP2203		CD2201
KEY A	3	→
KEY B	2	→
GND	1	→

CP2200		CD2201
GND	1	→
KEY B	2	→
KEY A	3	→

CP3604A	
UC_SDA	9
UC_SCL	8
NC	7
NC	6
GND	5
EN	4
TX	3
RX	2
VCC	1

NOTE: THIS INTERCONNECTION DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

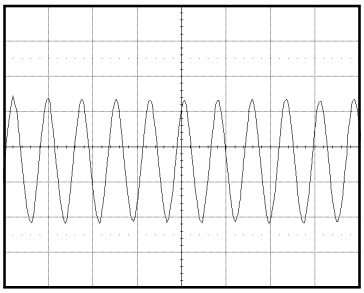
CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY 。

ATTENTION LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

WAVEFORMS

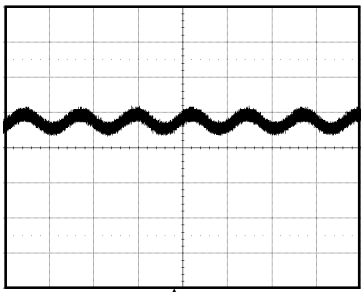
ADC1

20ns
1.0V



①

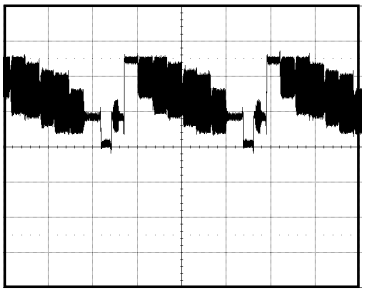
2.0ms
2.0V



⑥

TUNER

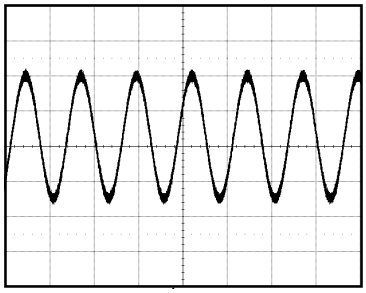
20µs
1.0V



⑪

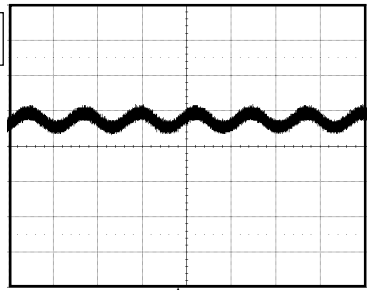
SOUND AMP/HEADPHON AMP

2.0ms
500mV



②

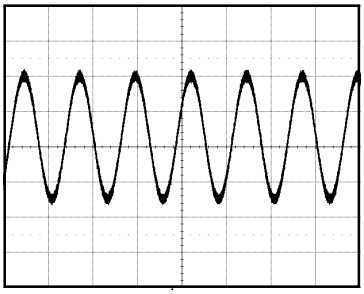
2.0ms
2.0V



⑦

STEREO

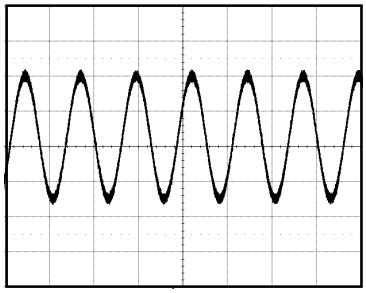
2.0ms
500mV



⑫

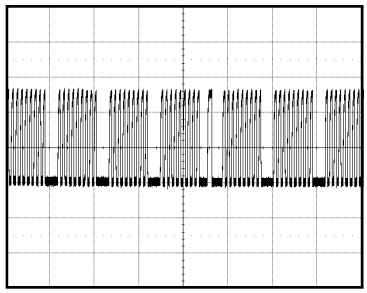
AV SWITCH2

2.0ms
500mV



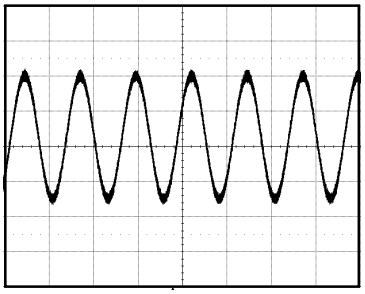
③

100µs
2.0V



⑧

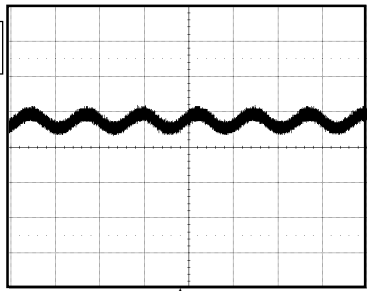
2.0ms
500mV



⑬

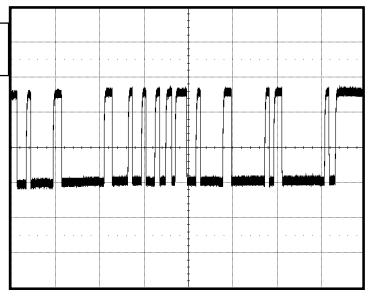
MICON

2.0ms
2.0V



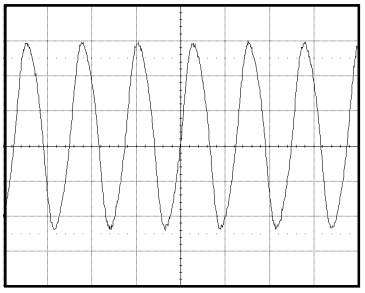
④

100µs
2.0V



⑨

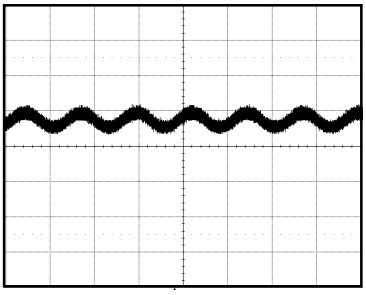
50ns
500mV



⑭

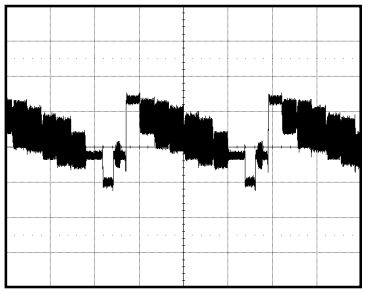
SCALER

2.0ms
2.0V



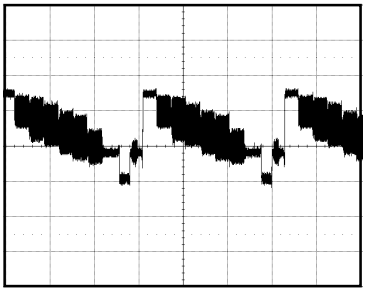
⑤

20µs
500mV



⑩

20µs
500mV



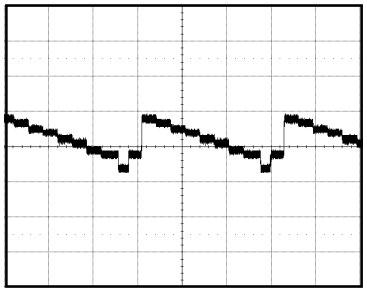
⑮

NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

WAVEFORMS

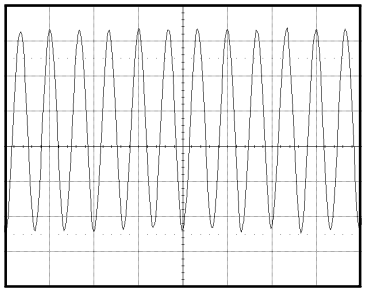
20µs
500mV

16



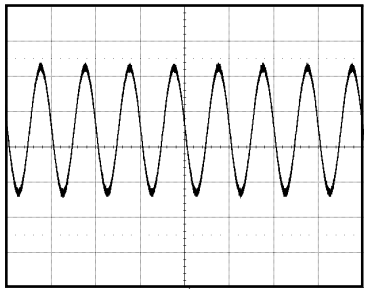
20µs
500mV

21



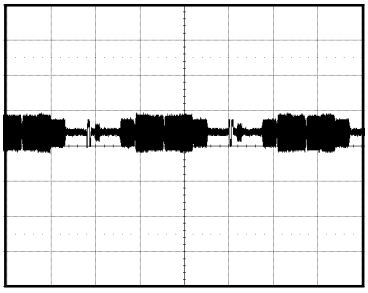
1.0ms
1.0V

26



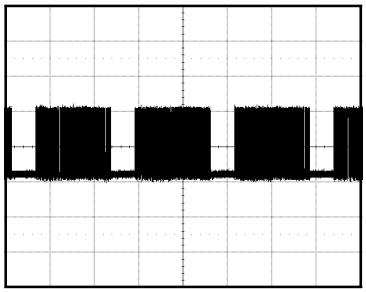
20µs
500mV

17



10µs
2.0V

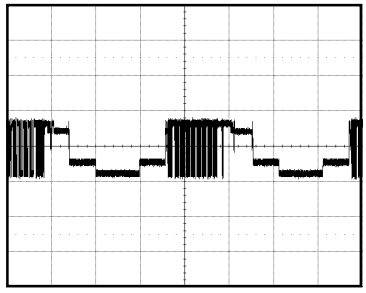
22



ADC1

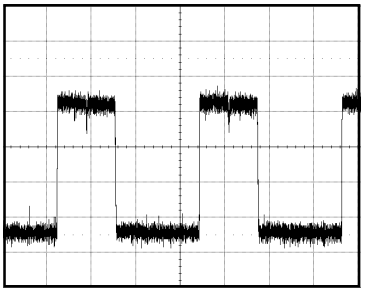
5µs
500mV

27



20µs
200mV

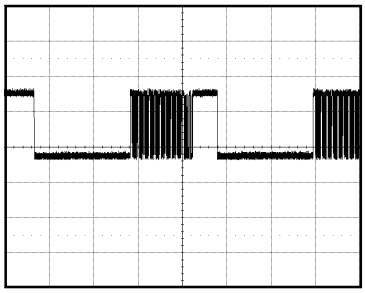
18



ADC1

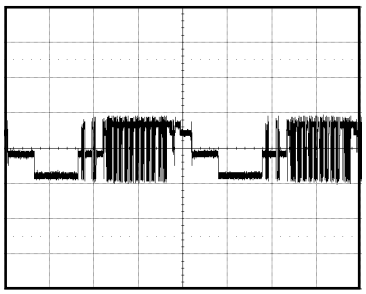
5µs
2.0V

23



5µs
500mV

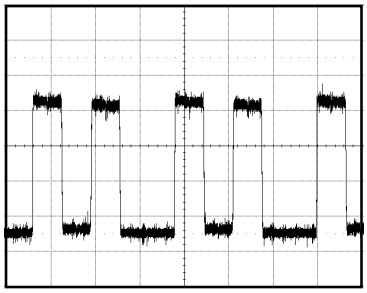
28



LVDS

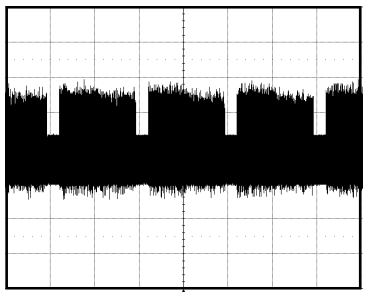
20µs
200mV

19



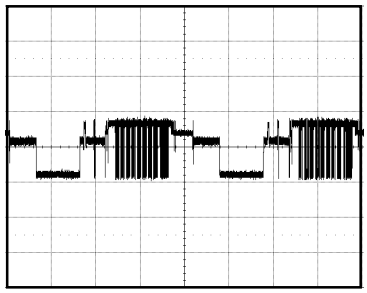
10ms
100mV

24



5µs
500mV

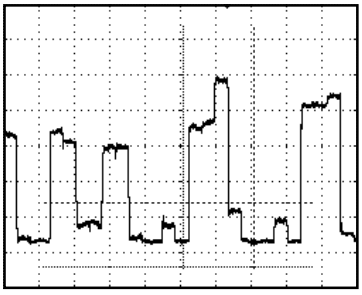
29



JACK

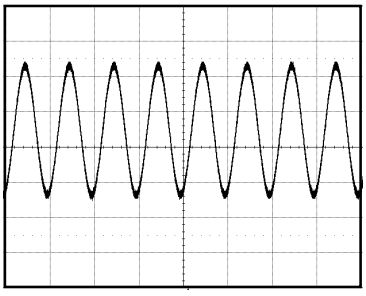
20µs
200mV

20



1.0ms
1.0V

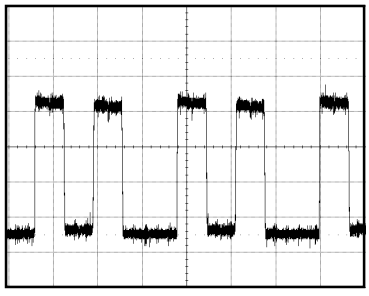
25



INTERFACE_HDMI IC

20µs
1.0V

30

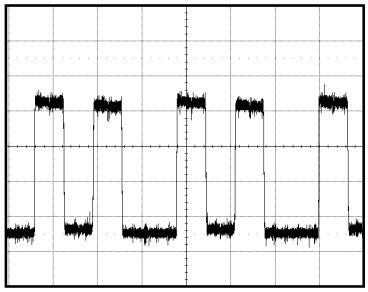


NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

WAVEFORMS

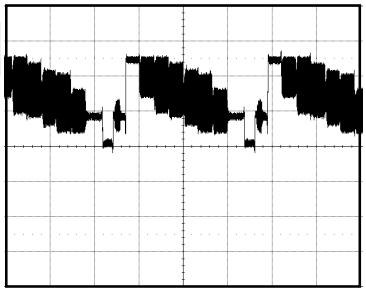
20µs
1.0V

(31)



20µs
1.0V

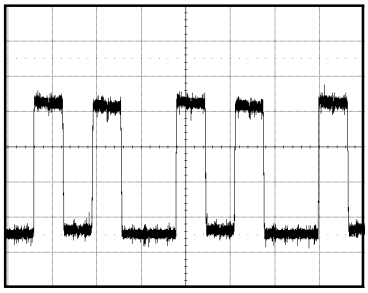
(36)



ASIC

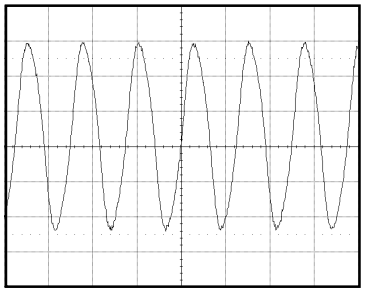
20µs
1.0V

(32)



10ns
50mV

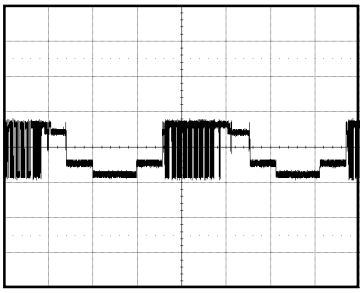
(37)



AV OUT

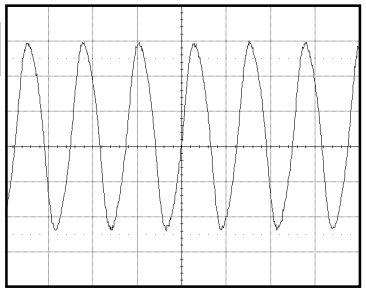
5µs
2.0V

(33)



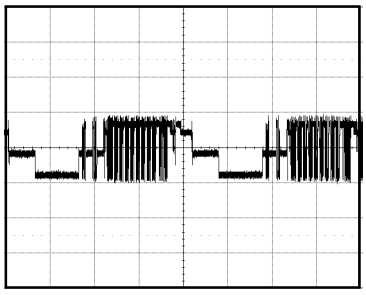
20ns
50mV

(38)



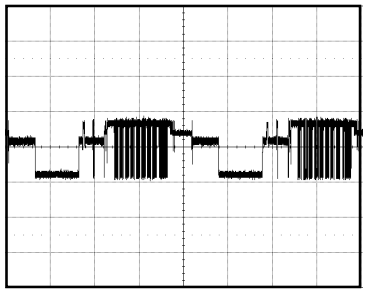
5µs
2.0V

(34)



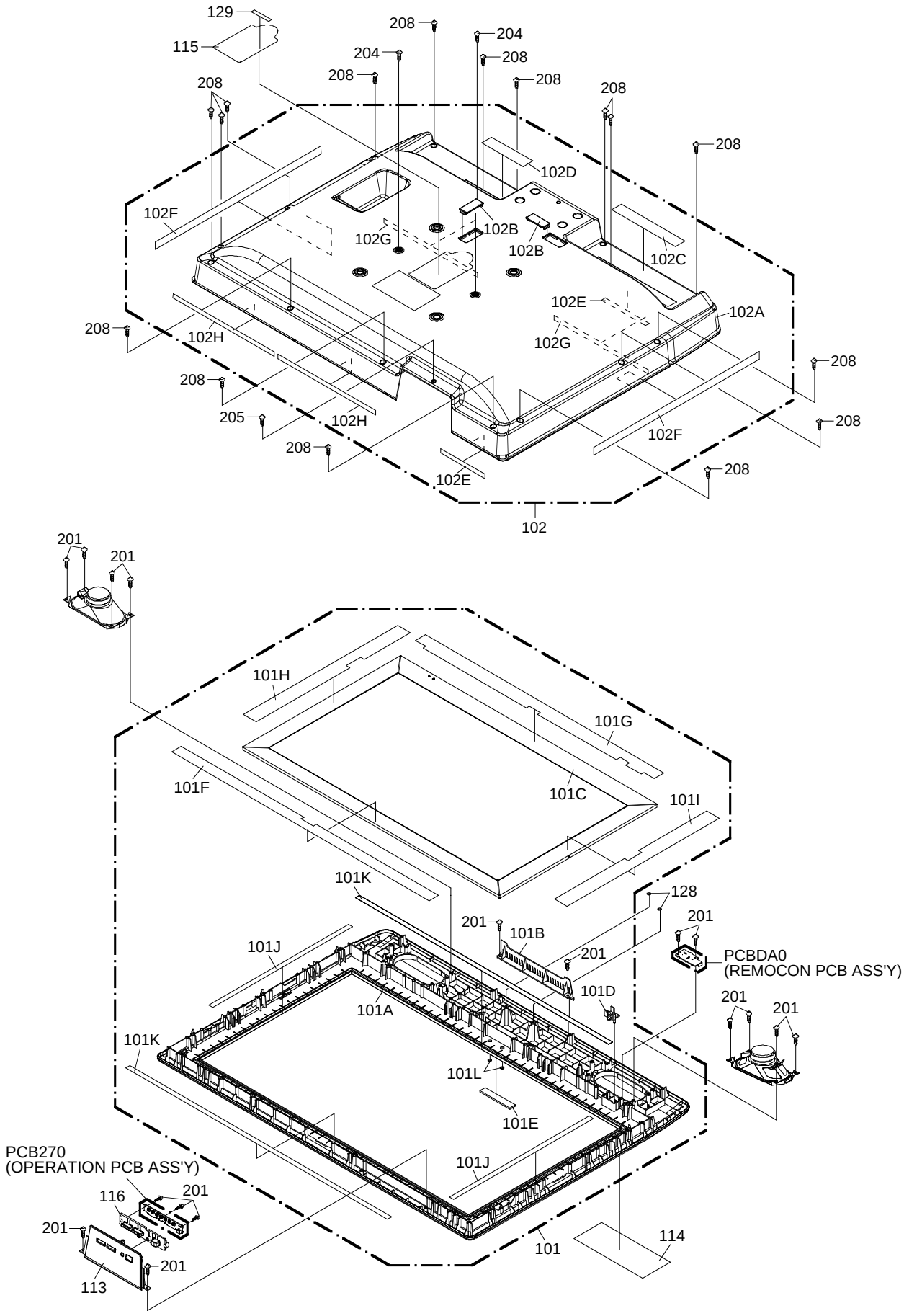
5µs
2.0V

(35)

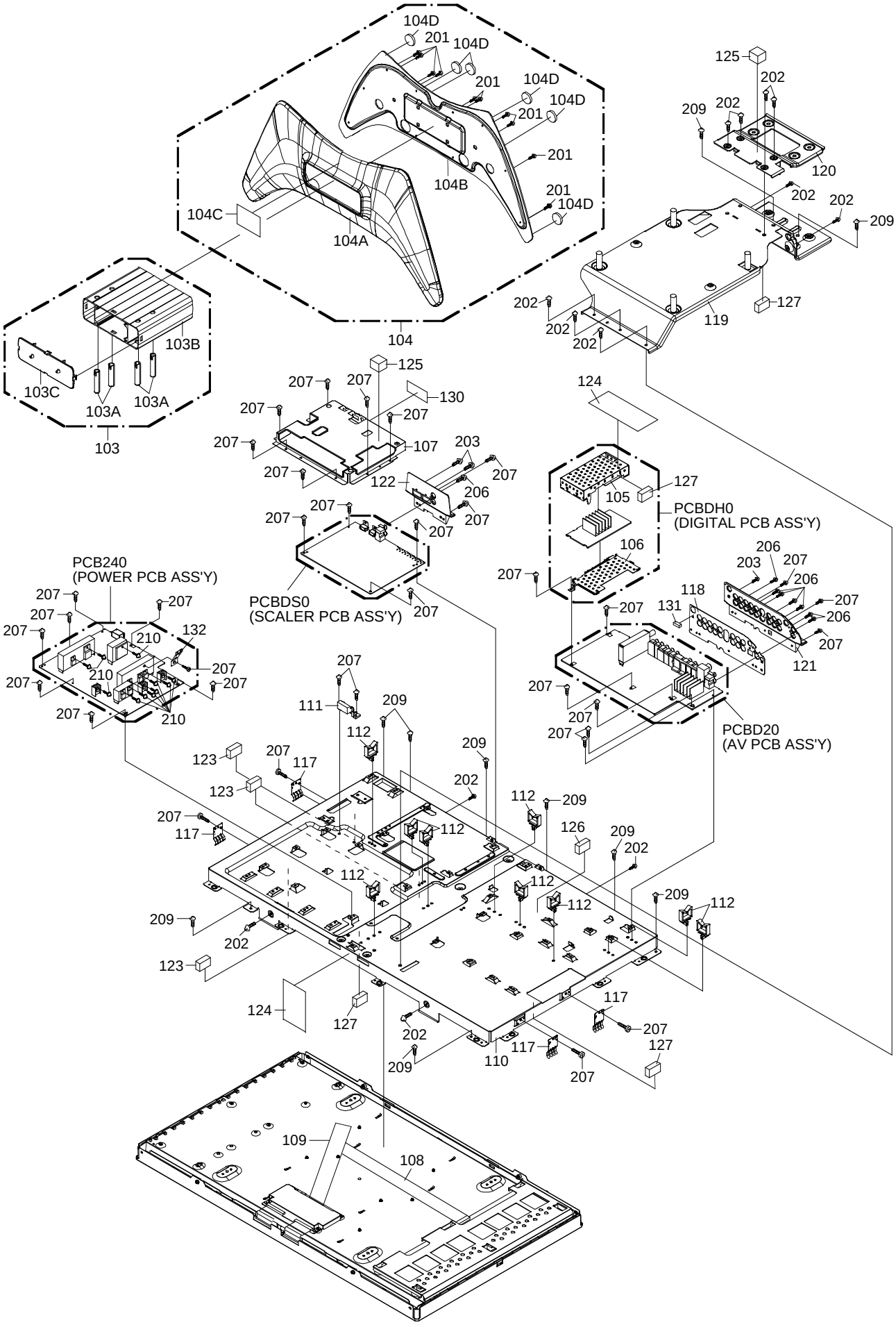


NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

MECHANICAL EXPLODED VIEW



MECHANICAL EXPLODED VIEW



MECHANICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION		REF. NO.	PART NO.	DESCRIPTION	
101	7A7010208A	FRONT,CABI ASS'Y		201	8110630A0U	SCREW TAP TITE(P) BRAZIER	3x10
101A	701WPB0212	CABINET,FRONT		202	810A14080U	SCREW WASHER(A)	M4x8
101B	702WPA1229	COVER,STAND		203	810213080S	SCREW,PAN	M3x8
101C	711WPD0708	PANEL,FRONT		204	810223080S	SCREW,BIND	M3x8
101D	713WPA0389	GLASS,LED		205	8110630A0S	SCREW TAP TITE(P) BRAZIER	3x10
101E	7235270014	BADGE,BRAND		206	810923080S	SCREW TAP TITE(B) BIND	3x8
101F	7290000164	DOUBLE,FACE-TAPE TOP		207	810923080U	SCREW TAP TITE(B) BIND	3x8
101G	7290000165	DOUBLE,FACE-TAPE BOTTOM		208	8110230A4S	SCREW,TAP TITE(P) BIND	3x14
101H	7290000166	DOUBLE,FACE-TAPE L		209	8117540A2U	SCREW,TAPPING(B0) TRUSS	4x12
101I	7290000167	DOUBLE,FACE-TAPE R					
101J	800WQ0A092	FELT SHEET		210	8109I30A0U	SCREW TAP TITE(B) WH7	3x10
101K	800WQ00102	FELT SHEET	9x730xT0.5				
101L	83SPN2000W	PUSH NUT		---	72300p8166	SHEET BARCODE	
				---	7290000173	SHEET,INFORMATION	
102	7A7020082A	BACK,CABI ASS'Y		---	774WPA0010	HOLDER,CORD	
102A	702WPA1219	CABINET,BACK		---	791WHA0125	PACKING SACK	
102B	706WPA0016	COVER,CONNECTOR		---	791WHA0126	PACKING SACK	
102C	7230008121	SHEET,JACK-1		---	791WHA0127	LAMIFILM BAG	
102D	7230008122	SHEET,JACK-2		---	792WHA0653	PACKAGE,TOP	
102E	800WQ0A064	FELT SHEET		---	792WHA0654	PACKAGE,BOTTOM	
102F	800WQ0A092	FELT SHEET		---	792WHA0660	PACKAGE,STAND-TOP	
102G	800WQ0A097	FELT SHEET		---	792WHA0661	PACKAGE,STAND-BOTTOM	
102H	800WQ0A108	FELT SHEET		---	793WCD1747	GIFT BOX	
				---	890GDAIA24	SCREW	
103	7A7640001A	FRAME,STAND ASS'Y		---	A3Y101E975	INSTRUCTION BOOK KIT	
103A	701WPA1423	HOLDER,STAND		---	J3Y10117A	REGISTRATION CARD	
103B	761WEB0001	FRAME,STAND		---	J3Y10131A	INSTRUCTION BOOK(E/F/S)	
103C	761WPA0436	COVER,STAND FRAME		---	JA4ND200	POLYBAG INSTRUCTION(RED CAUTION)	
104	7A7040014A	STAND ASS'Y					
104A	704WPB0020	STAND					
104B	761WSB0039	ANGLE,STAND					
104C	7290000172	SHEET,CAUTION					
104D	800WFA0063	CUSHION,LEG					
105	752WSA0555	SHIELD,DIGITAL					
106	752WSA0556	DIGITAL SHIELD,COVER					
107	752WSA0565	SHIELD,SCALER					
108	753WEA0031	SHEET,CU					
109	753WEA0034	SHEET,CU					
110	761WSA0330	COVER,LCD					
111	771WPA0343	HOLDER,AC-INLET					
112	899CH16000	HOLDER,WIRE					
113	711WPD0702	PLATE,BUTTON					
114	7230008152	POP,LABEL					
115	7235270022	SHEET,RATING					
116	735WPB0334	BUTTON,FRAME					
117	744WUA0022	SPRING,EARTH					
118	752WSA0566	SHIELD,JACK					
119	761WSA0331	ANGLE,BACK-1					
120	761WSA0332	ANGLE,BACK-2					
121	771WPA0341	PLATE,JACK-1					
122	771WPA0342	PLATE,JACK-2					
123	8965TS3020	CUSHION 65TS10-30	20x20x12				
124	890MP2401A	TAPE	50x35				
125	8965TS202A	CUSHION 65TS20-20	20x15x12				
126	800WFA0094	CUSHION	5x30xT6				
127	8965TS1017	CUSHION 65TS10-10	17.5x20x14				
128	800WB0A007	FIBER WASHER					
129	7220001220	SHEET SERIAL					
130	890MP2401G	TAPE	30X12				
131	8965TS0415	CUSHION 65TS4-2	15x50x16				
132	752WSA0519	SPRING,EARTH					

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION		
		RESISTORS		
⚠ R507	RC31X1155J	RC	1.5M OHM 1W	
⚠ R524	R3X181R27J	R,METAL OXIDE	0.27 OHM 1W	
⚠ R527	R3X181R27J	R,METAL OXIDE	0.27 OHM 1W	
⚠ R529	R63881R22J	R,FUSE	0.22 OHM 1W	
⚠ R530	R3X181R27J	R,METAL OXIDE	0.27 OHM 1W	
⚠ R532	R65584101J	R,FUSE	100 OHM 1/4W	
⚠ R534	R3X18A104J	R,METAL OXIDE	100K OHM 2W	
⚠ R535	R65584101J	R,FUSE	100 OHM 1/4W	
⚠ R537	R3X18A104J	R,METAL OXIDE	100K OHM 2W	
⚠ R600	R5X2AE010J	R,CEMENT	1 OHM 7W	
R5820	R002T4104J	RC	100K OHM 1/4W	
		CAPACITORS		
C340	E61FF3821D	CE	820 UF 25V	
C342	E61FF3821D	CE	820 UF 25V	
⚠ C503	P2122B224M	CMP	0.22 UF 275V ECQUL	
⚠ C506	CD39E0ME3M	CC	0.0015UF 250V	
⚠ C507	P2122B104M	CMP	0.1 UF 275V ECQUL	
⚠ C509	P2122B224M	CMP	0.22 UF 275V ECQUL	
⚠ C510	E71LFC591D	CE	590 UF 200V	
⚠ C511	E61DFC101D	CE	100 UF 200V	
C513	C0PLRR7G3K	CC	0.0018 UF 2KV R	
C515	C0PLRR7U2K	CC	680 PF 2KV R	
C521	C03L0R7H2K	CC	220 PF 2KV R	or
	C0PLRR7H2K	CC	220 PF 2KV R	
C523	P411F4393J	CMPP	0.039 UF 400V ECWF	
C527	P411F4393J	CMPP	0.039 UF 400V ECWF	
⚠ C529	CD39B0MQ2K	CC	470 PF 250V	
⚠ C530	CD39B0MH2K	CC	220 PF 250V	
C531	C03L0R7H2K	CC	220 PF 2KV R	or
	C0PLRR7H2K	CC	220 PF 2KV R	
C532	C03L0R7H2K	CC	220 PF 2KV R	or
	C0PLRR7H2K	CC	220 PF 2KV R	
⚠ C535	E61FF3102D	CE	1000 UF 25V	
C536	C03L0R7H2K	CC	220 PF 2KV R	or
	C0PLRR7H2K	CC	220 PF 2KV R	
⚠ C537	E61FF1222D	CE	2200 UF 10V	
⚠ C539	E61FF4122D	CE	1200 UF 35V	
⚠ C540	E61FF3102D	CE	1000 UF 25V	
⚠ C541	E02LU2101M	CE	100 UF 16V	
⚠ C542	E61FF4122D	CE	1200 UF 35V	
⚠ C543	E61FF2102D	CE	1000 UF 16V	
⚠ C545	E61FF2102D	CE	1000 UF 16V	
⚠ C547	E5EZU2221M	CE	220 UF 16V	
⚠ C548	E5EZU2221M	CE	220 UF 16V	
⚠ C549	E61FF4122D	CE	1200 UF 35V	
⚠ C558	E02LU2101M	CE	100 UF 16V	
⚠ C560	E61FT2681D	CE	680 UF 16V	
⚠ C583	E61DFC101D	CE	100 UF 200V	
C3801	E61FF2102D	CE	1000 UF 16V	
C3802	E61FF2102D	CE	1000 UF 16V	
C3803	E61FF2102D	CE	1000 UF 16V	
C3810	E61FF2102D	CE	1000 UF 16V	
C3825	E61FF3821D	CE	820 UF 25V	
C3826	E61FF3821D	CE	820 UF 25V	
C5824	E02LT0102M	CE	1000 UF 6.3V	
C5826	C0JTSL4Q1J	CC	47 PF 50V SL	
		DIODES		
D101	DE7RB5R62B	DIODE,ZENER	UDZS5.6B TE-17	
D105	DD7R20S300	DIODE,SCHOTTKY BARRIER	RB520S-30-TE61	
D109	DD7R20S300	DIODE,SCHOTTKY BARRIER	RB520S-30-TE61	
D302	D28R1QS040	DIODE	EC31QS04-TE12L	
D303	D28R1QS040	DIODE	EC31QS04-TE12L	
D304	D28R1QS040	DIODE	EC31QS04-TE12L	
D305	D28R1QS040	DIODE	EC31QS04-TE12L	
D501	D4AT01H3E0	DIODE,RECTIFIER	1H3-E	or
	D28X0ERB20	DIODE,RECTIFIER	10ERB20-TA2B5	
D502	D28T21DQN9	DIODE,SCHOTTKY	21DQ09N-TA2B1	
⚠ D503	D6CE24110A	DIODE,VARISTA	ENE241D-10A-Q6	
⚠ D504	DOU002720M	DIODE,VARISTA	DSS-272M-S00B	
⚠ D505	D6E027110A	DIODE,VARISTA	ENE271D-10A	
D506	D97U02R21B	DIODE,ZENER	MTZJ2.2B T-77	
⚠ D507	D2B0BV6080	DIODE,BRIDGE	RBV-608	
⚠ D508	D2WTRM11C0	DIODE,SILICON	RM11C-EIC	
⚠ D509	D2WTRM11C0	DIODE,SILICON	RM11C-EIC	
⚠ D510	D2WTRM11C0	DIODE,SILICON	RM11C-EIC	
⚠ D511	D2WTRM11C0	DIODE,SILICON	RM11C-EIC	
D512	D1VT001330	DIODE,SILICON	1SS133T-77	

REF. NO.	PART NO.	DESCRIPTION		
		DIODES		
D513	D1VT001330	DIODE,SILICON	1SS133T-77	
D514	D97U05R61B	DIODE,ZENER	MTZJ5.6B T-77	
D515	D97U06R21B	DIODE,ZENER	MTZJ6.2B T-77	
D516	D1VT001330	DIODE,SILICON	1SS133T-77	
⚠ D517	D97U06R21B	DIODE,ZENER	MTZJ6.2B T-77	
D518	D2B0RU3AM0	DIODE,SILICON	RU3AM	
D519	D1VT001330	DIODE,SILICON	1SS133T-77	
D520	D2BXARS010	DIODE,SILICON	SARS01-V1	
D521	D1VT001330	DIODE,SILICON	1SS133T-77	
D522	D1VT001330	DIODE,SILICON	1SS133T-77	
D523	D4AT01H3E0	DIODE,RECTIFIER	1H3-E	or
	D28T0ERB20	DIODE,RECTIFIER	10ERB20-TA1B2	
D524	D4AT01H3E0	DIODE,RECTIFIER	1H3-E	or
	D28T0ERB20	DIODE,RECTIFIER	10ERB20-TA1B2	
D525	D1VT001330	DIODE,SILICON	1SS133T-77	
D526	D1VT001330	DIODE,SILICON	1SS133T-77	
D527	D1VT001330	DIODE,SILICON	1SS133T-77	
⚠ D528	D2BAMX22S0	DIODE,SCHOTTKY	FMX-22S	
D529	D4AT01H3E0	DIODE,RECTIFIER	1H3-E	or
	D28T0ERB20	DIODE,RECTIFIER	10ERB20-TA1B2	
⚠ D530	D2BAMX22S0	DIODE,SCHOTTKY	FMX-22S	
⚠ D531	D2BAMX22S0	DIODE,SCHOTTKY	FMX-22S	
⚠ D532	D27A85T400	DIODE,SCHOTTKY	RB085T-40	
⚠ D533	D2CA2C15R0	DIODE,SCHOTTKY BARRIER	YG862C15R	
D534	D97U02701B	DIODE,ZENER	MTZJ27B T-77	
D535	D28T21DQN9	DIODE,SCHOTTKY	21DQ09N-TA2B1	
D538	DD7R0S3550	DIODE,SILICON	1SS355 TE-17	
D539	D28R1QS040	DIODE	EC31QS04-TE12L	
D540	D28R1QS040	DIODE	EC31QS04-TE12L	
D541	D28R1QS040	DIODE	EC31QS04-TE12L	
D542	D28R1QS040	DIODE	EC31QS04-TE12L	
D543	D2LKSR3400	DIODE,SCHOTTKY	SR340-004	or
	D2LKB340F0	DIODE,SCHOTTKY	SB340FL-6737	
D544	0021E9Q010	LED	LTL-1BEFJ-002A	
D545	D2WXN40050	DIODE,SILICON	1N4005-EIC	
D802	DE7RB5R62B	DIODE,ZENER	UDZS5.6B TE-17	
D803	DE7RB5R62B	DIODE,ZENER	UDZS5.6B TE-17	
D805	DE7RB5R62B	DIODE,ZENER	UDZS5.6B TE-17	
D807	DD7R0S3550	DIODE,SILICON	1SS355 TE-17	
D808	DD7R0S3550	DIODE,SILICON	1SS355 TE-17	
D901	D97U05R61B	DIODE,ZENER	MTZJ5.6B T-77	
D3206	D28R1QS040	DIODE	EC31QS04-TE12L	
D3207	D28R1QS040	DIODE	EC31QS04-TE12L	
D3212	D28R11FS20	DIODE	EC11FS2-TE12L	
D3402	D28R1QS040	DIODE	EC31QS04-TE12L	
D3403	D28R11FS20	DIODE	EC11FS2-TE12L	
D3404	D28R11FS20	DIODE	EC11FS2-TE12L	
D3405	D28R1QS040	DIODE	EC31QS04-TE12L	
D3406	D28R1QS040	DIODE	EC31QS04-TE12L	
D3407	DD7R20S300	DIODE,SCHOTTKY BARRIER	RB520S-30-TE61	
D3408	D27RX301L0	DIODE,SCHOTTKY	RSX301L-30TE25	
D3600	DD7R60L400	DIODE,SCHOTTKY	RB160L-40-TE25	
D3601	D77R1A1R10	DIODE,VARISTA	AVRL161A1R1NT	
D3602	DE7RB5R62B	DIODE,ZENER	UDZS5.6B TE-17	
D3603	D77R1A1R10	DIODE,VARISTA	AVRL161A1R1NT	
D3604	DD7R60L400	DIODE,SCHOTTKY	RB160L-40-TE25	
D3605	DD7R60L400	DIODE,SCHOTTKY	RB160L-40-TE25	
D3609	DE7RB3R32B	DIODE,ZENER	UDZS3.3B TE-17	
D3613	DE7RB3R32B	DIODE,ZENER	UDZS3.3B TE-17	
D3626	D77R1A1R10	DIODE,VARISTA	AVRL161A1R1NT	
D3627	D77R1A1R10	DIODE,VARISTA	AVRL161A1R1NT	
D3628	D28R1QS040	DIODE	EC31QS04-TE12L	
D3629	D28R1QS040	DIODE	EC31QS04-TE12L	
D3630	DE7RB5R62B	DIODE,ZENER	UDZS5.6B TE-17	
D3801	D1VT001330	DIODE,SILICON	1SS133T-77	
D3802	D28T21DQN4	DIODE,SCHOTTKY	21DQ04N-TA2B1	
D3804	D4AT01H3E0	DIODE,RECTIFIER	1H3-E	or
	D28T0ERB20	DIODE,RECTIFIER	10ERB20-TA1B2	
D3805	D4AT01H3E0	DIODE,RECTIFIER	1H3-E	or
	D28T0ERB20	DIODE,RECTIFIER	10ERB20-TA1B2	
D3811	D28R1QS040	DIODE	EC31QS04-TE12L	
D3812	D28R1QS040	DIODE	EC31QS04-TE12L	
D4202	DE7RB8R22B	DIODE,ZENER	UDZS8.2B TE-17	
D4203	DE7RB8R22B	DIODE,ZENER	UDZS8.2B TE-17	
D4206	D97U08R21B	DIODE,ZENER	MTZJ8.2B T-77	
D4207	D97U08R21B	DIODE,ZENER	MTZJ8.2B T-77	
D4208	DE7RB8R22B	DIODE,ZENER	UDZS8.2B TE-17	

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION		
		DIODES		
D4209	D1VT001330	DIODE,SILICON	1SS133T-77	
D4210	DE7RB8R22B	DIODE,ZENER	UDZS8.2B TE-17	
D4301	DE7RB5R62B	DIODE,ZENER	UDZS5.6B TE-17	
D4302	DE7RB5R62B	DIODE,ZENER	UDZS5.6B TE-17	
		ICS		
IC101	I56F07154A	IC	OEC7154A	
IC102	I9UF032290	IC	PST3229NR	
IC103	S3Y101EE02	MEMORY DATA	AT24C256N-10SU-2.7	
IC104	S3Y101EE01	MEMORY DATA	AT24C256N-10SU-2.7	
⚠ IC301	I1MFPA2020	IC	TA2024-ASE	
⚠ IC501	I1KJ9A431A	IC	KIA431A-AT	
⚠ IC502	I0BT0X6730	IC	STR-X6737	
⚠ IC503	I2BT0W6730	IC	STR-W6735	
⚠ IC504	I1KJ9A431A	IC	KIA431A-AT	
⚠ IC505	I07A078100	IC	BA7810T-V5	
⚠ IC506	I07T0BC0W0	IC	BA00BC0WCP-V5E2	
⚠ IC508	I03T057740	IC	LA5774-E	
IC509	I1LF010150	IC	AL1015	
⚠ IC510	I0GA9090R0	IC	PQ090RDA1SZH	
⚠ IC511	000220002W	PHOTO COUPLER	PS2561AL1-1-V(W)	
⚠ IC512	000220002W	PHOTO COUPLER	PS2561AL1-1-V(W)	
IC801	I56K07A720	IC	R8J66607A72FP	
IC904	I19FF4440G	IC	MSP4440G-QA-C13-100	
IC2101	IFSK0883C0	IC	MST9883C-LF-110	
IC2401	IFNME240H0	IC	X240H(215H48AGA21HG)	
IC2402	ICLJ022ET5	IC	HY5DU561622ETP-D43	
IC2403	ICLJ022ET5	IC	HY5DU561622ETP-D43	
IC2404	I57F04L640	IC	BR24L64F-WE2	
IC2405	I97F052290	IC	BD5229G-TR	
IC2406	ICLF0281A0	IC	HY27US08281A-TPCB	
⚠ IC3201	I07F0C0WF0	IC	BA00BC0WFP-E2	
⚠ IC3202	I07F078200	IC	BD7820FP-E2	
IC3401	I1LF010420	IC	AL1042	
⚠ IC3402	I07F0C0WF0	IC	BA00BC0WFP-E2	
⚠ IC3403	I07F078200	IC	BD7820FP-E2	
⚠ IC3404	I07F00HFP0	IC	BA7810HFP-TR	
IC3601	I07F078200	IC	BD7820FP-E2	
IC3602	I07F0C0WF0	IC	BA00BC0WFP-E2	
IC3605	IG1F090210	IC	SII9021CTU	
IC3606	S3Y101EE04	MEMORY DATA	BR24L02F-WE2	
IC3608	S3Y101EE03	MEMORY DATA	BR24L32F-WE2	
IC3609	S3Y101EE05	MEMORY DATA	BR24L02F-WE2	
IC3611	ICMF0T89E0	IC	SST89E58RD2-40-C-TQJE	
IC3801	I1LF010100	IC	AL1010	
⚠ IC3804	I0GA9XF010	IC	PQ070XF01SZH	
IC3805	I03D979950	IC	LA7995M-TLM	
IC4201	I01F05853B	IC	AN15853B-E1	
IC4204	I0QF025840	IC	NJM2584AM(TE1)	
IC4304	I0QF02534V	IC	NJM2534V(TE2)	
IC4305	I0QF02534V	IC	NJM2534V(TE2)	
IC4401	I0QF025840	IC	NJM2584AM(TE1)	
IC5801	I55J07W660	IC	TC7W66FU(TE12L,F)	
IC7201	IF8F0385A0	IC	ICSV385AGLFT	
IC8103	I0UF015010	IC	MM1501XNRE	
		TRANSISTORS		
Q101	TNRAC05003	COMPOUND TRANSISTOR	RT1N241C-T112-1	or
	TNAAC05002	COMPOUND TRANSISTOR	KRC103SRTK	
Q104	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q105	TPRAC05003	COMPOUND TRANSISTOR	RT1P241C-T112-1	or
	TPAAC05002	COMPOUND TRANSISTOR	KRA103SRTK	
Q106	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q300	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q301	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q302	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q501	TCATC31980	TRANSISTOR,SILICON	KTC3198-AT(Y,GR)	
Q502	TNRAB05004	COMPOUND TRANSISTOR	RT1N141C-T112-1	or
	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q503	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1	or
	TAAA1504SY	TRANSISTOR,SILICON	KTA1504S_Y_RTK	
Q504	TJ7M50P030	FET	RSS050P03_TB	
Q505	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q507	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q508	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1	or
	TAAA1504SY	TRANSISTOR,SILICON	KTA1504S_Y_RTK	

REF. NO.	PART NO.	DESCRIPTION		
		TRANSISTORS		
Q511	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	or
	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	
Q512	T0300J6500	FET	2SJ650	
Q513	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	or
	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	
Q514	TNRAB05004	COMPOUND TRANSISTOR	RT1N141C-T112-1	or
	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q515	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q901	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q902	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q2101	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1	
Q2401	T2AA5132E0	FET	KTK5132E-RTK/P	
Q2403	T2AA5132E0	FET	KTK5132E-RTK/P	
Q2404	T2AA5132E0	FET	KTK5132E-RTK/P	
Q2406	T2AA5132E0	FET	KTK5132E-RTK/P	
Q2407	T2AA5132E0	FET	KTK5132E-RTK/P	
Q3205	TAAA01664Y	TRANSISTOR,SILICON	KTA1664-Y-RTF/P	
Q3206	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q3210	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q3211	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q3403	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA039280	TRANSISTOR,SILICON	2SC3928A-T112-1R	
Q3404	TNAAC05002	COMPOUND TRANSISTOR	KRC103SRTK	or
	TNRAC05003	COMPOUND TRANSISTOR	RT1N241C-T112-1	
⚠ Q3405	TJYASP8K30	FET	SP8K3 TB	
Q3406	TNAAC05002	COMPOUND TRANSISTOR	KRC103SRTK	or
	TNRAC05003	COMPOUND TRANSISTOR	RT1N241C-T112-1	
Q3407	TPAAA05001	COMPOUND TRANSISTOR	KRA101SRTK	or
	TPRAA05002	COMPOUND TRANSISTOR	RT1P431C-T112-1	
Q3603	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q3604	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q3605	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q3606	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q3607	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q3613	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q3615	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q3616	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q3617	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q3618	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q3619	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q3620	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q3813	TJ7M50P030	FET	RSS050P03_TB	
Q4202	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q4203	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q4205	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q4206	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q4207	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q4208	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q4209	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q4210	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q4231	TPRAC05003	COMPOUND TRANSISTOR	RT1P241C-T112-1	or
	TPYJC05001	COMPOUND TRANSISTOR	DTA124EKAT146	
Q4233	TNRAB05004	COMPOUND TRANSISTOR	RT1N141C-T112-1	or
	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q4302	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q4305	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q4401	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1	
Q4402	TPRAB05002	COMPOUND TRANSISTOR	RT1P141C-T112-1	or
	TPAAB05001	COMPOUND TRANSISTOR	KRA102SRTK	
Q4403	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q4409	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1	
Q4410	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1	
Q5801	TPRAA05002	COMPOUND TRANSISTOR	RT1P431C-T112-1	
Q5802	TNRAC05003	COMPOUND TRANSISTOR	RT1N241C-T112-1	
Q5803	T82A03841Q	TRANSISTOR,SILICON	2SC3841-T1B_T63	

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	
TRANSISTORS			
Q5804	T82A03841Q	TRANSISTOR,SILICON	2SC3841-T1B_T63
Q5805	T82A03841Q	TRANSISTOR,SILICON	2SC3841-T1B_T63
Q8101	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1
Q8102	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1
Q8103	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1
Q8105	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1
Q8106	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1
COILS &TRANSFORMERS			
L300	021W0G100M	COIL	10 UH
L301	021W0G100M	COIL	10 UH
L302	021W0G100M	COIL	10 UH
L303	021W0G100M	COIL	10 UH
L501	02167E220K	COIL	22 UH
L502	02186I6R8L	COIL	6.8 UH
L503	02186I6R8L	COIL	6.8 UH
L504	021W0G330M	COIL	33 UH
L505	021W0G100M	COIL	10 UH
⚠ L506	029X000129	COIL,LINE FILTER	SS30V-R300071
⚠ L507	029X000129	COIL,LINE FILTER	SS30V-R300071
L901	02167F100J	COIL	10 UH
L903	02167F100J	COIL	10 UH
L904	02167F100J	COIL	10 UH
L2101	0216S8220K	COIL	22 UH
L2102	0216S8220K	COIL	22 UH
L2103	0216S8470K	COIL	47 UH
L2106	0216S42R2J	COIL	2.2 UH
L2107	0216S8220K	COIL	22 UH
L2401	0216SD1R0J	COIL	1 UH
L2411	0216SDR47J	COIL	0.47 UH
L2412	0216SDR47J	COIL	0.47 UH
L2413	0216SDR47J	COIL	0.47 UH
L2414	0216SDR47J	COIL	0.47 UH
L3401	0211M44R7M	COIL	4.7 UH
L3601	02D6000068	COIL,CHOKE	ACM2012D-900-2P-T00
L3602	02D6000068	COIL,CHOKE	ACM2012D-900-2P-T00
L3603	02D6000068	COIL,CHOKE	ACM2012D-900-2P-T00
L3604	02D6000068	COIL,CHOKE	ACM2012D-900-2P-T00
L3605	02D6000068	COIL,CHOKE	ACM2012D-900-2P-T00
L3606	02D6000068	COIL,CHOKE	ACM2012D-900-2P-T00
L3607	02D6000068	COIL,CHOKE	ACM2012D-900-2P-T00
L3608	02D6000068	COIL,CHOKE	ACM2012D-900-2P-T00
L3801	02167E220K	COIL	22 UH
L3802	02167E220K	COIL	22 UH
L3803	02167E220K	COIL	22 UH
L3804	02167E220K	COIL	22 UH
L3806	021404150M	COIL	15 UH
L3807	02167E100K	COIL	10 UH
L3809	02186I6R8L	COIL	6.8 UH
L3810	02167E100K	COIL	10 UH
L4201	02167F101J	COIL	100 UH
L4202	02167F470J	COIL	47 UH
L4203	02167F470J	COIL	47 UH
L4206	02167F470J	COIL	47 UH
L4207	02167F470J	COIL	47 UH
L4212	021LA6220J	COIL	22 UH
L4213	021LA6220J	COIL	22 UH
L4214	021LA6220J	COIL	22 UH
L4215	021LA6220J	COIL	22 UH
L4216	021LA6220J	COIL	22 UH
L4217	021LA6220J	COIL	22 UH
L4218	021LA6220J	COIL	22 UH
L4219	021LA6220J	COIL	22 UH
L4301	0216S8470K	COIL	47 UH
L4306	0216S8220K	COIL	22 UH
L4401	02167F221J	COIL	220 UH
L4403	02167F470J	COIL	47 UH
L5801	02167F220J	COIL	22 UH
L5802	02167F220J	COIL	22 UH
L5803	02167F101J	COIL	100 UH
L5804	021LA6220J	COIL	22 UH
L7201	0216S8470K	COIL	47 UH
L7202	0216S8470K	COIL	47 UH
L7203	0216S8470K	COIL	47 UH
L8102	0216S8470K	COIL	47 UH
L8105	0216S8220K	COIL	22 UH
⚠ T501	0481350964	TRANSFORMER,SWITCHING	81350964
⚠ T502	0481420774	TRANSFORMER,SWITCHING	81420774

REF. NO.	PART NO.	DESCRIPTION	
JACKS			
⚠ J502	064Q1A0003	JACK,AC	CCT2302-0911
J4201	060K411041	RCA JACK	AV2-13P2-07H
J4202	060K401126	RCA JACK	AVG-2-13
J4204	060K471011	RCA JACK	AV4-57A03-01H
J4205	063E000082	JACK PLATE	SAV-12CP-01Z5
J4211	060K441006	RCA JACK	AV6-53-13H
J4301	060J431025	RCA JACK	MSD-242VA1-03_NI_FE_LF
SWITCHES			
SW2201	0504101T34	SWITCH,TACT	EVQ21505R
SW2202	0504101T34	SWITCH,TACT	EVQ21505R
SW2203	0504101T34	SWITCH,TACT	EVQ21505R
SW2204	0504101T34	SWITCH,TACT	EVQ21505R
SW2205	0504101T34	SWITCH,TACT	EVQ21505R
SW2206	0504101T34	SWITCH,TACT	EVQ21505R
P.C.BOARD ASSEMBLIES			
PCB240	A3Y101E240	PCB ASS'Y	CEF171A
PCB270	A3Y101E270	PCB ASS'Y	CEF185A
PCBD20	A3Y101ED20	PCB ASS'Y	CMF080A
PCBDA0	A3Y101EDA0	PCB ASS'Y	CEF182A
PCBDH0	A3Y101EDH0	PCB ASS'Y	CEF169A
PCBDS0	A3Y101EDS0	PCB ASS'Y	CEF156A
MISCELLANEOUS			
B501	024HT03563	CORE,BEADS	W4BRH3.5X6X1.0X2
B502	024HT03564	CORE,BEADS	W4BRH3.5X6X1.0
B505	024BC5121J	CORE,BEADS	BLM18PG121SN1D
B506	024AC5181J	CORE,BEADS	BLM18PG181SN1D
B507	024AC5181J	CORE,BEADS	BLM18PG181SN1D
B508	024BC5121J	CORE,BEADS	BLM18PG121SN1D
B801	024AC5181J	CORE,BEADS	BLM18PG181SN1D
B802	024AC5181J	CORE,BEADS	BLM18PG181SN1D
B803	024HC56005	CORE,BEADS	FCM1608CF-600T06 or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D
B804	024HC56005	CORE,BEADS	FCM1608CF-600T06 or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D
B805	024AC5181J	CORE,BEADS	BLM18PG181SN1D
B901	024BC5121J	CORE,BEADS	BLM18PG121SN1D
B902	024HC56005	CORE,BEADS	FCM1608CF-600T06 or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D
B903	024BC5121J	CORE,BEADS	BLM18PG121SN1D
B904	024HC51023	CORE,BEADS	FCM1608KF-102T02 or
	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B906	024HC51023	CORE,BEADS	FCM1608KF-102T02 or
	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2101	024HC56005	CORE,BEADS	FCM1608CF-600T06 or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D
B2401	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2402	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2403	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2404	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2405	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2406	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2407	024AC1601G	CORE,BEADS	BLM31PG601SN1L
B2408	024AC1601G	CORE,BEADS	BLM31PG601SN1L
B2409	024AC1601G	CORE,BEADS	BLM31PG601SN1L
B2410	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2411	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2412	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2413	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2414	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2415	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2416	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2417	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2418	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2419	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2420	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2421	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2422	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2423	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2424	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2425	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2426	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2427	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B3201	024AC5181J	CORE,BEADS	BLM18PG181SN1D
B3202	024AC5181J	CORE,BEADS	BLM18PG181SN1D
B3203	024AC5181J	CORE,BEADS	BLM18PG181SN1D
B3206	024AC5181J	CORE,BEADS	BLM18PG181SN1D
B3207	024AC5181J	CORE,BEADS	BLM18PG181SN1D

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION			REF. NO.	PART NO.	DESCRIPTION	
		MISCELLANEOUS					**MISCELLANEOUS**	
B3209	024AC5181J	CORE,BEADS	BLM18PG181SN1D		CP802	069EVU3030	CONNECTOR PCB SIDE	00_6232_030_006_800+
B3210	024AC5181J	CORE,BEADS	BLM18PG181SN1D		CP803	069EVT3030	CONNECTOR PCB SIDE	00_6232_029_006_800+
B3401	024AC5330J	CORE,BEADS	BLM18PG330SN1D		CP901	069S240629	CONNECTOR PCB SIDE	A2001WV2-4P
B3402	024AC1391G	CORE,BEADS	BLM31PG391SN1L		CD2201	06CU236302	CORD,CONNECTOR	CU236302
B3406	024AC1601G	CORE,BEADS	BLM31PG601SN1L		⚠ CD3801	1209119904	CORD,SET AC	9119904
B3407	024AC1601G	CORE,BEADS	BLM31PG601SN1L		CD3802	06CU124001	CORD,CONNECTOR	CU124001
B3408	024AC1601G	CORE,BEADS	BLM31PG601SN1L		CD3803	06CU1C4501	CORD,CONNECTOR	CU1C4501
B3410	024AC5151E	CORE,BEADS	BLM18BD151SN1D		CD3804	06CU174001	CORD,CONNECTOR	CU174001
B3601	024HC36001	CORE,BEADS	HCB2012K-600T25		CD3805	06CU145003	CORD,CONNECTOR	CU145003
B3602	024HC36001	CORE,BEADS	HCB2012K-600T25		CD3806	06CU274502	CORD,CONNECTOR	CU274502
B3603	024HC36001	CORE,BEADS	HCB2012K-600T25		CD3807	06CU2B6601	CORD,CONNECTOR	CU2B6601
B3604	024HC36001	CORE,BEADS	HCB2012K-600T25		CD4202	06CU256001	CORD,CONNECTOR	CU256001
B3605	024HC56005	CORE,BEADS	FCM1608CF-600T06	or	CD4203	122H0T1801	CORD,JUMPER	2H0T1801
	024AC5600E	CORE,BEADS	BLM18BB600SN1D		CD4204	122H0U1802	CORD,JUMPER	2H0U1802
B3606	024HC51023	CORE,BEADS	FCM1608KF-102T02	or	CD7204	06CHRU3201	CORD,CONNECTOR	CHRU3201
	024AC5102F	CORE,BEADS	BLM18BD102SN1D		CP2200	069S230629	CONNECTOR PCB SIDE	A2001WV2-3P
B3612	024HC51023	CORE,BEADS	FCM1608KF-102T02	or	CP2201	069S250639	CONNECTOR PCB SIDE	A2001WR2-5P
	024AC5102F	CORE,BEADS	BLM18BD102SN1D		CP2203	069S230639	CONNECTOR PCB SIDE	A2001WR2-3P
B3613	024HC36001	CORE,BEADS	HCB2012K-600T25		CP2403	06972KT059	CONNECTOR PCB SIDE	125607220W3
B3801	024HT03553	CORE,BEADS	W5RH3.5X5X1.0		CP2404	06972KT059	CONNECTOR PCB SIDE	125607220W3
B4202	024HC56005	CORE,BEADS	FCM1608CF-600T06	or	CP2405	069AAA1009	CONNECTOR PCB SIDE	YKF45-0036N
	024AC5600E	CORE,BEADS	BLM18BB600SN1D		CP3201	069S2B0629	CONNECTOR PCB SIDE	A2001WV2-11P
B4203	024HT03553	CORE,BEADS	W5RH3.5X5X1.0		CP3601	069HYJ3010	CONNECTOR PCB SIDE	DC1R019JDA
B4204	024HC56005	CORE,BEADS	FCM1608CF-600T06	or	CP3602	069S240629	CONNECTOR PCB SIDE	A2001WV2-4P
	024AC5600E	CORE,BEADS	BLM18BB600SN1D		CP3603	069HYJ3010	CONNECTOR PCB SIDE	DC1R019JDA
B4205	024HC56005	CORE,BEADS	FCM1608CF-600T06	or	CP3604	069S290629	CONNECTOR PCB SIDE	A2001WV2-9P
	024AC5600E	CORE,BEADS	BLM18BB600SN1D		CP3801	069S140019	CONNECTOR PCB SIDE	A2501WV2-4P
B4211	024HC56005	CORE,BEADS	FCM1608CF-600T06	or	CP3802	069S120019	CONNECTOR PCB SIDE	A2501WV2-2P
	024AC5600E	CORE,BEADS	BLM18BB600SN1D		CP3803	069S1C0019	CONNECTOR PCB SIDE	A2501WV2-12P
B4214	024HC56005	CORE,BEADS	FCM1608CF-600T06	or	CP3804	069S170019	CONNECTOR PCB SIDE	A2501WV2-7P
	024AC5600E	CORE,BEADS	BLM18BB600SN1D		CP3807	069S2B0629	CONNECTOR PCB SIDE	A2001WV2-11P
B4215	024HC56005	CORE,BEADS	FCM1608CF-600T06	or	CP3808	069S270629	CONNECTOR PCB SIDE	A2001WV2-7P
	024AC5600E	CORE,BEADS	BLM18BB600SN1D		CP4202	069S250629	CONNECTOR PCB SIDE	A2001WV2-5P
B4216	024HC56005	CORE,BEADS	FCM1608CF-600T06	or	CP4203	069EVT3030	CONNECTOR PCB SIDE	00_6232_029_006_800+
	024AC5600E	CORE,BEADS	BLM18BB600SN1D		CP4204	069EVU3030	CONNECTOR PCB SIDE	00_6232_030_006_800+
B4217	024HC56005	CORE,BEADS	FCM1608CF-600T06	or	CP5801	06972KM020	CONNECTOR PCB SIDE	TKC-W20P-U1
	024AC5600E	CORE,BEADS	BLM18BB600SN1D		CP5802	06972KM020	CONNECTOR PCB SIDE	TKC-W20P-U1
B4218	024HC56005	CORE,BEADS	FCM1608CF-600T06	or	CP7203	069HVWT04A	CONNECTOR PCB SIDE	FI-X30S-HF-NPB
	024AC5600E	CORE,BEADS	BLM18BB600SN1D		EL2401	124116281A	EYE LET	XRY16X28BD
B4219	024HC56005	CORE,BEADS	FCM1608CF-600T06	or	EL2402	124120301A	EYE LET	XRY20X30BD
	024AC5600E	CORE,BEADS	BLM18BB600SN1D		⚠ F501	081PC6R305	FUSE	51MS063L
B4220	024HC56005	CORE,BEADS	FCM1608CF-600T06	or	⚠ F502	0835A07005	MICRO FUSE	20N_7000FSW
	024AC5600E	CORE,BEADS	BLM18BB600SN1D		FH501	06710T0009	HOLDER,FUSE	EYF-52BCY
B4221	024HC56005	CORE,BEADS	FCM1608CF-600T06	or	FH502	06710T0009	HOLDER,FUSE	EYF-52BCY
	024AC5600E	CORE,BEADS	BLM18BB600SN1D		NR801	110P4000M4	R,NETWORK	4D03WGJ0000T5E
B4222	024HC56005	CORE,BEADS	FCM1608CF-600T06	or	NR802	110P4470M4	R,NETWORK	4D03WGJ0470T5E
	024AC5600E	CORE,BEADS	BLM18BB600SN1D		NR803	110P4470M4	R,NETWORK	4D03WGJ0470T5E
B4307	0246C51024	CORE,BEADS	MMZ1608R102CT		NR804	110P4470M4	R,NETWORK	4D03WGJ0470T5E
B4308	0246C51024	CORE,BEADS	MMZ1608R102CT		NR805	110P4470M4	R,NETWORK	4D03WGJ0470T5E
B5801	024AC5181J	CORE,BEADS	BLM18PG181SN1D		NR806	110P4470M4	R,NETWORK	4D03WGJ0470T5E
B5802	024AC5181J	CORE,BEADS	BLM18PG181SN1D		NR807	110P4470M4	R,NETWORK	4D03WGJ0470T5E
B5803	024AC5181J	CORE,BEADS	BLM18PG181SN1D		NR808	110P4103M4	R,NETWORK	4D03WGJ0103T5E
B7201	024HC56005	CORE,BEADS	FCM1608CF-600T06	or	NR809	110P4103M4	R,NETWORK	4D03WGJ0103T5E
	024AC5600E	CORE,BEADS	BLM18BB600SN1D		NR2101	110P4101M4	R,NETWORK	4D03WGJ0101T5E
BT001	141U004016	BATTERY,MANGAN	MNAAA(R03)	or	NR2102	110P4101M4	R,NETWORK	4D03WGJ0101T5E
	141R004016	BATTERY,MANGAN	GR03X-SP2		NR2103	110P4101M4	R,NETWORK	4D03WGJ0101T5E
BT002	141U004016	BATTERY,MANGAN	MNAAA(R03)	or	NR2104	110P4101M4	R,NETWORK	4D03WGJ0101T5E
	141R004016	BATTERY,MANGAN	GR03X-SP2		NR2105	110P4101M4	R,NETWORK	4D03WGJ0101T5E
CD301	06CU123401	CORD,CONNECTOR	CU123401		NR2106	110P4101M4	R,NETWORK	4D03WGJ0101T5E
CD303	06CU128001	CORD,CONNECTOR	CU128001		NR2401	110P4102M5	R,NETWORK	4D02WGJ0102TCE
CD505	06CU2E5401	CORD,CONNECTOR	CU2E5401		NR2402	110P4220M6	R,NETWORK	4D02WGJ0220TCE
CD901	06CU248101	CORD,CONNECTOR	CU248101		NR2403	110P4220M6	R,NETWORK	4D02WGJ0220TCE
CP101	069S250629	CONNECTOR PCB SIDE	A2001WV2-5P		NR2404	110P4220M6	R,NETWORK	4D02WGJ0220TCE
CP102	069S2A0629	CONNECTOR PCB SIDE	A2001WV2-10P		NR2405	110P4220M6	R,NETWORK	4D02WGJ0220TCE
CP103	069S270629	CONNECTOR PCB SIDE	A2001WV2-7P		NR2406	110P4560M5	R,NETWORK	4D02WGJ0560TCE
CP301	069S130419	CONNECTOR PCB SIDE	A2502WV2-3P		NR2407	110P4560M5	R,NETWORK	4D02WGJ0560TCE
CP303	069S120419	CONNECTOR PCB SIDE	A2502WV2-2P		NR2408	110P4560M5	R,NETWORK	4D02WGJ0560TCE
CP504	069D01001A	CONNECTOR PCB SIDE	003P-2100		NR2409	110P4560M5	R,NETWORK	4D02WGJ0560TCE
⚠ CP505	069D01001A	CONNECTOR PCB SIDE	003P-2100		NR2410	110P4560M5	R,NETWORK	4D02WGJ0560TCE
CP506	069S2E0629	CONNECTOR PCB SIDE	A2001WV2-14P		NR2411	110P4560M5	R,NETWORK	4D02WGJ0560TCE
CP507	069S170019	CONNECTOR PCB SIDE	A2501WV2-7P		NR2412	110P4560M5	R,NETWORK	4D02WGJ0560TCE
CP508	069S270629	CONNECTOR PCB SIDE	A2001WV2-7P		NR2413	110P4560M5	R,NETWORK	4D02WGJ0560TCE
CP510	069S120019	CONNECTOR PCB SIDE	A2501WV2-2P		NR3601	110P4000M4	R,NETWORK	4D03WGJ0000T5E
CP511	069S1C0019	CONNECTOR PCB SIDE	A2501WV2-12P		NR3602	110P4000M4	R,NETWORK	4D03WGJ0000T5E
CP512	069S140019	CONNECTOR PCB SIDE	A2501WV2-4P		NR3603	110P4000M4	R,NETWORK	4D03WGJ0000T5E
CP513	069D01001A	CONNECTOR PCB SIDE	003P-2100		NR3604	110P4000M4	R,NETWORK	4D03WGJ0000T5E
CP514	069W01001A	CONNECTOR PCB SIDE	003P-2100		NR3605	110P4000M4	R,NETWORK	4D03WGJ0000T5E

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	
		MISCELLANEOUS	
NR3606	110P4000M4	R,NETWORK	4D03WGJ0000T5E
NR7201	110P4470M4	R,NETWORK	4D03WGJ0470T5E
NR7202	110P4470M4	R,NETWORK	4D03WGJ0470T5E
OS2200	077A033001	REMOTE RECEIVER	ROM-V338TAO
⚠ RY501	0560V50118	RELAY	ALKS329
SH501	126R000036	TERMINAL PIN	TP00385-21
SH502	126R000036	TERMINAL PIN	TP00385-21
SH503	126R000036	TERMINAL PIN	TP00385-21
SH504	126R000036	TERMINAL PIN	TP00385-21
⚠ SP301	0701016002	SPEAKER	EAS12D175B
⚠ SP302	0701016002	SPEAKER	EAS12D175B
SH4201	126R000038	TERMINAL PIN	TP00370-21
SH4202	126R000038	TERMINAL PIN	TP00370-21
SH4203	126R000038	TERMINAL PIN	TP00370-21
SH4204	126R000038	TERMINAL PIN	TP00370-21
SH4205	126R000038	TERMINAL PIN	TP00370-21
SH4301	126R000038	TERMINAL PIN	TP00370-21
SH4302	126R000038	TERMINAL PIN	TP00370-21
⚠ TH501	DSRFSP3R0L	THERMISTOR	NTPAN3R0LDKB0
TM101	07660MP010	TRANSMITTER	SBNS02009A
TR301	02AHB9A972	CORE,FERRITE	W5T29X7.5X19
TR303	02AHB9A972	CORE,FERRITE	W5T29X7.5X19
TR304	02AHB9A972	CORE,FERRITE	W5T29X7.5X19
TR305	02AHB9A972	CORE,FERRITE	W5T29X7.5X19
TR504	02AHB9A972	CORE,FERRITE	W5T29X7.5X19
TR507	02AHB9A972	CORE,FERRITE	W5T29X7.5X19
TR2201	02AHB9A972	CORE,FERRITE	W5T29X7.5X19
⚠ TU5801	0164500006	DIGITAL TUNER	TUMUDTR-V110V
⚠ V2301	09E4132003	LCD	LK315T3LZ4C
X101	100WT01611	CRYSTAL	HC-49/U-S
X801	100YT05401	CRYSTAL	FCX-03
X901	100CT01804	CRYSTAL	HC-49/U-S
X2401	100DT05501	CRYSTAL	SMD-49
X2402	100DT02503	CRYSTAL	SMD-49
X3601	100CT01101	CRYSTAL	HC-49/U-S
X3602	100DT02801	CRYSTAL	SMD-49

RESISTOR

RC..... CARBON RESISTOR

CAPACITORS

CC..... CERAMIC CAPACITOR
CE..... ALUMI ELECTROLYTIC CAPACITOR
CP..... POLYESTER CAPACITOR
CPP..... POLYPROPYLENE CAPACITOR
CPL..... PLASTIC CAPACITOR
CMP..... METAL POLYESTER CAPACITOR
CMPL..... METAL PLASTIC CAPACITOR
CMPP..... METAL POLYPROPYLENE CAPACITOR

SPEC.NO.	M3Y1-01E
O/R NO.	W623019